

STUDIES IN TAXATION AND PUBLIC FINANCE

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COST OF GOVERNMENT IN THE UNITED STATES 1927-1928

GOVERNMENT



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PREFACE

THE tasks of government in the United States have been distributed to so many different agencies that the public often fails to recognize how extensive are the operations of government and how stupendous are its costs. To hold down the cost of government as nearly as practicable to the limits of what is necessary for efficient administration, with due regard for the requirements of public welfare, has been recognized as a desirable principle of statesmanship to guide government policy. But statesmanship in general, and this type of statesmanship in particular, can not be expected in any large measure in the great number of those who fill legislative and executive positions; and relatively few of those who are responsible for the expenditure of public funds seem to hold maxims of strict economy in high esteem.

It has often been urged that what is most needed in governmental affairs is business administration. Business is not parsimonious; it does not flinch from large expenditures when such expenditures are believed to be necessary. Business administration in government would immediately recognize that the government of a nation as large and populous as the United States is a huge undertaking, requiring the cooperation of a very large number of experts and other staff members and involving tremendous outlays. It would, however, measure the result against the outlay and assure itself that the return justifies the expenditure.

Perhaps the first step toward infusing into government the spirit of business administration is to awaken among the public at large a full and complete realization of what government is costing. It was with this end in view that the National Industrial Conference Board some years ago began its studies of the "Cost of Government in the United States."

The present volume, the seventh annual study in the series, gives a comprehensive account of the financial operations of federal, state and local governments in the United

States, primarily for the fiscal years ended in 1927 and 1928. To a considerable extent it follows the precedents of former issues, but increasing experience in handling the subject and additional sources of information enable the Board each year to give to its statements greater precision, as well as to introduce from time to time information upon important topics not previously considered. Thus, in the present volume the Conference Board has been able to elaborate some of the material previously given with regard to public indebtedness. Even more important is the inclusion of a new chapter, with statistical tables and charts, analyzing the sources from which government tax revenue, federal, state and local, is derived.

In the preparation of its studies the National Industrial Conference Board avails itself of the experience and judgment of the business executives who compose its membership, and of recognized authorities in special fields, in addition to the scientific knowledge and equipment of its Research Staff. The publications thus finally represent the result of scientific investigation and broad business experience, and the conclusions expressed therein are those of the Conference Board as a body.

The fact that the Board has been able to present year by year these comprehensive statements regarding the finances of all governmental authorities in the United States is in part due to the abundance of government documents on fiscal affairs, but that these figures could be brought up to date is in large measure the result of the courtesy of state tax commissioners and other officials who have rendered willing aid in the preparation of the volumes. To all of them grateful acknowledgment is hereby made for their assistance and cooperation.

This study is the result of an investigation conducted by Mr. Lewis H. Kimmel, and assistants, of the Conference Board's Research Staff, under the supervision of the Staff Economic Council.

MAGNUS W. ALEXANDER

President

New York City
January, 1930

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THE COST OF GOVERNMENT IN THE UNITED STATES, 1927-1928

CHAPTER I

GOVERNMENTAL EXPENDITURES

IN THE United States, government as a whole, consisting of the Federal Government, the states, counties, cities, towns and villages and special administrative divisions, is an enormous organization with vast expenditures which aggregated more than \$12 billions for the fiscal year ended in 1927. To each of the agencies forming part of the whole definite jurisdictions are assigned which are often superimposed upon one another, while the functions performed by them frequently overlap. In analyzing governmental expenditures it is necessary to consider the expenditures from the double point of view of the agency that expends the funds and the purposes for which they are expended. Such a double classification is necessary because none of the several classes of functions for which public expenditures are made are carried on exclusively by a single type of governmental agency.

Before considering in detail the several functions for which expenditures are made, it may be well to present certain facts with regard to combined governmental expenditures and, in particular, to trace their growth in recent years.

VOLUME AND TREND OF COMBINED GOVERNMENTAL EXPENDITURES

As shown in Table 1 and Chart 1, the gross¹ expenditures of all governmental divisions of the United States for the fiscal year ended in 1927 amounted to \$12,179 millions, an increase

¹ Gross governmental expenditures include payments for interest and retirement of public debt.

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of almost 5% over the expenditures of \$11,616 millions for the preceding year. The increase in expenditures in the fiscal year ended in 1927 was slightly greater than the increase in either of the two preceding years.

TABLE 1: COMBINED GROSS GOVERNMENTAL EXPENDITURES,
FISCAL YEARS 1890 TO 1927¹

(Computed by National Industrial Conference Board)

Disbursing Authority	1890	1903	1913	1923	1924	1925	1926	1927
<i>Amount (in millions)</i>								
Federal ²	\$291	\$475	\$692	\$3,885	\$4,121	\$3,765	\$3,936	\$4,069
State.....	77	182	383	1,242	1,432	1,532	1,539	1,656
Local ³	487	913	1,844	5,136	5,421	5,829	6,141	6,454
Total.....	\$855	\$1,570	\$2,919	\$10,263	\$10,974	\$11,126	\$11,616	\$12,179
<i>Per Capita</i>								
Federal.....	\$4.61	\$5.87	\$7.17	\$34.78	\$36.23	\$32.63	\$33.60	\$34.30
State.....	1.22	2.25	3.97	11.12	12.59	13.28	13.14	13.96
Local.....	7.73	11.27	19.10	45.98	47.67	50.52	52.43	54.41
Total.....	\$13.56	\$19.39	\$30.24	\$91.88	\$96.49	\$96.43	\$99.17	\$102.67

¹ Data on federal expenditures from annual reports of the U. S. Secretary of the Treasury; data on state expenditures from U. S. Bureau of the Census, "Wealth, Debt and Taxation" series and "Financial Statistics of States" series; for sources and method of obtaining figures for local expenditures see Appendix A, p. 137.

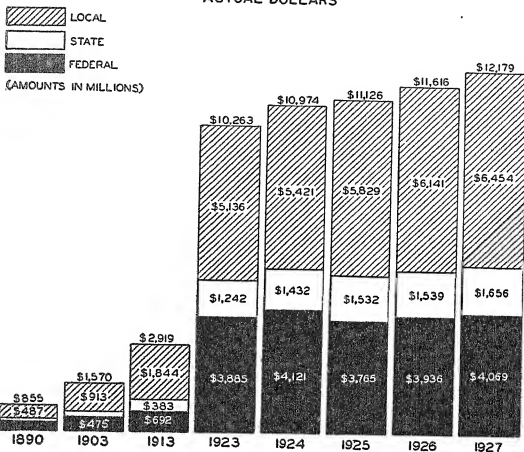
² Expenditures for the District of Columbia deducted from federal total and included in local.

While governmental expenditures expressed in dollars of current purchasing power are significant, a uniform basis is desirable for comparative purposes. In Table 2 and Chart 1, therefore, governmental expenditures are expressed in "1913" dollars, on the assumption that, on the average, the commodities purchased by governmental divisions are affected in the same way by price fluctuations as are commodities in general, and that payments for services follow in the main the same general course as commodity prices.

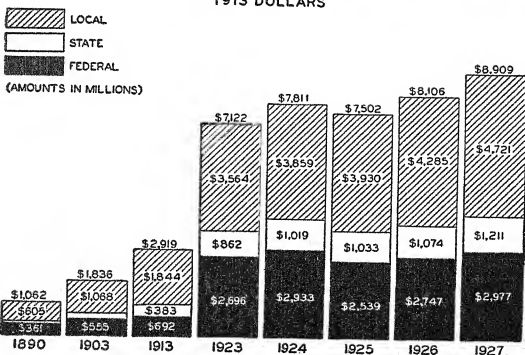
Governmental expenditures expressed in "1913" dollars amounted to \$2,919 millions for the fiscal year ended in 1913 and to \$8,909 millions for that ended in 1927, an increase of more than 200%. Local expenditures for the fiscal year ended in 1927, expressed in "1913" dollars, were more than 60% greater than combined governmental expenditures in

CHART 1: COMBINED GROSS GOVERNMENTAL EXPENDITURES,
FISCAL YEARS 1890 TO 1927
(National Industrial Conference Board)

ACTUAL DOLLARS



"1913" DOLLARS



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TABLE 2: COMBINED GROSS GOVERNMENTAL EXPENDITURES,
FISCAL YEARS 1890 TO 1927, EXPRESSED IN
"1913" DOLLARS¹

(Computed by National Industrial Conference Board)

Disbursing Authority	1890	1903	1913	1923	1924	1925	1926	1927
----------------------	------	------	------	------	------	------	------	------

Amount (in millions)

Federal.....	\$361	\$555	\$692	\$2,696	\$2,933	\$2,539	\$2,747	\$2,977
State.....	96	213	383	862	1,019	1,033	1,074	1,211
Local.....	605	1,068	1,844	3,564	3,859	3,930	4,285	4,721
Total.....	\$1,062	\$1,836	\$2,919	\$7,122	\$7,811	\$7,502	\$8,106	\$8,909

Per Capita

Federal.....	\$5.73	\$6.85	\$7.17	\$24.13	\$25.79	\$22.00	\$23.45	\$25.09
State.....	1.52	2.63	3.97	7.72	8.96	8.95	9.17	10.21
Local.....	9.59	13.19	19.10	31.91	33.93	34.07	36.58	39.80
Total.....	\$16.84	\$22.67	\$30.24	\$63.76	\$68.68	\$65.02	\$69.20	\$75.10

¹ U. S. Bureau of Labor Statistics' wholesale price index used.

1913. The increase in local expenditures in "1913" dollars during the period 1913 to 1927 exceeded 150%, while federal and state expenditures were, by the same measure, respectively 4.3 and 3.2 times as large in 1927 as in 1913.

Per capita governmental expenditures in the fiscal year ended in 1927 amounted to \$102.67 as compared with \$99.17 for the preceding year. Tables 1 and 2 show that beginning with 1923 combined governmental expenditures, measured in either actual dollars or in "1913" dollars, have increased more rapidly than population. Measured in "1913" dollars, per capita expenditures for the fiscal year ended in 1927 amounted to \$75.10, as compared with \$30.24 for 1913 and \$63.76 for 1923. Per capita governmental expenditures measured in "1913" dollars therefore increased more than 100% during the period 1913 through 1923, and were about 18% greater in the fiscal year ended in 1927 than in that ended in 1923.

Governmental expenditures per family amounted to \$441.48 for the fiscal year ended in 1927, as compared with \$426.43 for the preceding year. Measured in "1913" dollars, governmental expenditures per family amounted to \$322.93 for the fiscal year ended in 1927 and to \$130.03 for that ended in 1913.

GOVERNMENTAL EXPENDITURES

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DISTRIBUTION OF GOVERNMENTAL EXPENDITURES BY DISBURSING AUTHORITY

The expenditures of the Federal Government for the fiscal year ended in 1927 amounted to \$4,069 millions, only one-third of the total for all governmental divisions. Table 3 indicates that this proportion was the lowest since the great increase in federal expenditures which resulted from the World War. Since 1923 the proportion of federal to combined governmental expenditures has decreased each year with the exception of the fiscal year ended in 1926. For the fiscal year ended in 1923, federal expenditures amounted to \$3,885 millions, or 37.9% of all governmental expenditures. For the fiscal year ended in 1927 the proportion was 33.4%.

**TABLE 3: PERCENTAGE DISTRIBUTION OF COMBINED GROSS
GOVERNMENTAL EXPENDITURES, BY DISBURSING
AUTHORITY, FISCAL YEARS 1890 TO 1927**

(Computed by National Industrial Conference Board)

Disbursing Authority	1890	1903	1913	1923	1924	1925	1926	1927
Federal.....	34.0	30.3	23.7	37.9	37.6	33.8	33.9	33.4
State.....	9.0	11.6	13.1	12.1	13.0	13.8	13.2	13.6
Local.....	57.0	58.1	63.2	50.0	49.4	52.4	52.9	53.0
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Both state and local governments have increased their expenditures in each year since 1923, although, in relation to combined governmental expenditures, neither state nor local expenditures have showed successive annual increases. However, the proportion of both state and local expenditures to combined expenditures was greater for the fiscal year ended in 1927 than for that ended in 1923. The proportion of state expenditures to combined governmental expenditures increased from 12.1% for the fiscal year ended in 1923 to 13.6% for the fiscal year ended in 1927. On the other hand, local expenditures for the fiscal year ended in 1923 amounted to 50.0% of combined governmental expenditures and to 53.0% for the fiscal year ended in 1927. State expenditures, particularly for highway and educational purposes, have been expanding rapidly; this expansion is reflected in the increase in the proportion of combined expenditures attributed to the

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states. In this connection it is interesting to note that state expenditures in 1927 formed a relatively larger part of combined governmental expenditures than in 1913. On the other hand, the proportion of local expenditures to combined governmental expenditures was much lower in 1927 than in 1913.

FEDERAL EXPENDITURES

The gross expenditures of the Federal Government in recent years have shown a tendency to decrease, while net expenditures, which do not include payments for interest and debt redemption, have shown a tendency to increase. In the fiscal year ended in 1929, federal gross expenditures amounted to \$3,932 millions, a decrease of approximately one per cent from the fiscal year ended in 1928, in which year federal gross expenditures were 2.5% less than in the fiscal year ended in 1927. The distribution of gross expenditures among the items of debt redemption, interest payments on federal indebtedness, and current payments for materials and services is shown in Table 4.

TABLE 4: NET AND GROSS EXPENDITURES OF THE FEDERAL GOVERNMENT, FISCAL YEARS 1926 TO 1929

(Source: Annual Reports of the Secretary of the Treasury. Computed by National Industrial Conference Board)

Item	1926	1927		1928		1929	
	Amount (in thousands)	Amount (in thousands)	Per Cent Increase or (—) Decrease over 1926	Amount (in thousands)	Per Cent Increase or (—) Decrease over 1927	Amount (in thousands)	Per Cent Increase or (—) Decrease over 1928
Net expenditures ¹	\$2,231,263	\$2,149,443	—3.67	\$2,332,101	8.50	\$2,580,413	10.65
Interest ¹	831,938	787,020	—5.40	731,764	—7.02	678,330	—7.30
Debt redemption ²	873,089	1,133,009	29.77	905,884	—20.05	673,093	—25.70
Gross total	\$3,936,290	\$4,069,472	3.38	\$3,969,749	—2.45	\$3,931,836	—0.96

¹ On the basis of daily treasury statements, unrevised.

² On the basis of daily treasury statements, revised.

Net expenditures of the Federal Government, which represent the cost of carrying on its current and developmental activities, amounted for the fiscal year ended June 30, 1929, to \$2,580 millions, an amount 10.7% greater than net expenditures for the preceding year. The trend of federal net

expenditures in recent years has been upward, and the estimates for the fiscal years ending in 1930 and 1931 indicate a continuation of this trend.

Redemption of the federal debt and refunding operations have been reflected in smaller annual interest payments. Total interest payments for the fiscal year ended in 1929 amounted to \$678 millions, as compared with \$732 millions for the previous year, a decrease amounting to 7.3%. This decrease was greater than that shown in other recent years, and was particularly significant in view of the fact that debt redemption for the fiscal year ended in 1929 was smaller in amount than for any year since 1923. Also, short-term borrowings during the fiscal year ended in 1929 were at substantially higher rates than in the years immediately preceding. The success of the refunding operations in recent years is clearly indicated by the decrease in total interest payments in a fiscal year during which short-term money rates were high and a smaller amount of debt was retired.

Debt redemption for the fiscal year ended in 1929 amounted to \$673 millions, a decrease of 25.7% from the \$906 millions of debt redeemed in the preceding year. As explained later, the aggregate retirements in any fiscal year are accomplished by means of funds from several sources. The variations from year to year have been caused very largely by the changes in the amount of surplus available. The surplus for the fiscal year ended in 1929 was smaller than in preceding years, and consequently the volume of retirements effected from this source was smaller. Debt retirements from ordinary receipts were slightly greater in 1929 than in 1928.

Functional Distribution of Federal Expenditures

The functional distribution of net and gross expenditures of the Federal Government for recent years is shown in Table 5. Interest payments constituted a smaller proportion of total gross expenditures in the fiscal year ended in 1928 than in the preceding year. Debt redemption in 1928 also accounted for a much smaller proportion of gross expenditures than in the preceding year. Total expenditures for debt service in 1928 amounted to 41.3% of gross expenditures, as compared with 47.4% in the preceding year.

TABLE 5: FUNCTIONAL DISTRIBUTION OF FEDERAL GOVERNMENTAL EXPENDITURES, FISCAL YEARS 1924 TO 1928¹

(Source: Annual Reports of the Secretary of the Treasury. Computed by National Industrial Conference Board)

Purpose of Disbursement	1924		1925		1926		1927		1928	
	Per Cent of Net Total	Per Cent of Gross Total	Per Cent of Net Total	Per Cent of Gross Total	Per Cent of Net Total	Per Cent of Gross Total	Per Cent of Net Total	Per Cent of Gross Total	Per Cent of Net Total	Per Cent of Gross Total
General government.....	17.5	8.8	17.6	10.0	15.9	9.0	15.6	8.2	15.3	9.0
Protection.....	63.1	31.9	63.3	36.2	61.1	34.6	66.6	35.0	66.5	39.0
Education.....	0.5	0.2	0.6	0.3	0.7	0.4	0.7	0.4	0.7	0.4
Highways.....	4.4	2.2	4.5	2.6	4.6	2.6	4.4	2.3	4.0	2.3
Economic development.....	6.9	3.5	6.6	3.8	6.8	3.9	7.4	3.9	7.6	4.5
Social welfare.....	3.7	1.9	3.9	2.2	3.2	1.8	2.6	1.3	2.5	1.5
Miscellaneous.....	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Public utilities.....	3.8	1.9	3.3	1.9	7.6	4.3	2.6	1.4	3.3	1.9
Net total.....	100.0	50.5	100.0	57.1	100.0	56.7	100.0	52.6	100.0	58.7
Debt redemption ².....	..	26.7	..	19.5	..	22.2	..	27.9	..	22.8
Interest.....	..	22.8	..	23.4	..	21.1	..	19.5 ³	..	18.5
Gross total.....	..	100.0	..	100.0	..	100.0	..	100.0 ³	..	100.0

¹ Fiscal years 1924, 1925, and 1926 on basis of warrants issued. Fiscal years 1927 and 1928 on basis of checks issued. A comparison of the 1927 data on the two bases showed only slight changes in the percentage distribution.

² Net redemption for the fiscal year.

³ See footnote 3, Table 6.

The most significant feature of federal expenditures is the large proportion made for the purpose of protection. In the fiscal year ended in 1928, the maintenance of the army and navy and other protective activities accounted for almost two-thirds of the net expenditures of the Federal Government. Since almost all of the federal debt outstanding was incurred in connection with our participation in the World War, the major portions of debt retirements and interest payments may also be regarded as expenditures for protection. If they are so considered, expenditures for protection amounted to 80.3% of federal gross expenditures for the fiscal year ended in 1928 and to 82.4% for the preceding year. The inclusion of payments for debt retirement under protection, of course, involves double counting if the period considered is one in which borrowed funds were expended for protection and in which retirements of the debt were also effected. However, in recent years additional debt has not been incurred for protective purposes and hence no objection can be found to the inclusion of debt retirements for these years under protection, provided that comparisons are not made with years in which the borrowed funds were originally expended.

Expenditures for economic development showed a small proportional increase for the fiscal year ended in 1928. The expenditures for public utility purposes amounted to 3.3% of net expenditures for the fiscal year ended in 1928, as compared with only 2.6% for the preceding year. These were the only functions for which the 1928 proportion of net expenditures was greater than the proportion for the preceding year.

STATE AND LOCAL EXPENDITURES

Combined state and local gross expenditures for the fiscal year ended in 1927 amounted to \$8,121¹ millions, as compared with \$7,691 millions for the preceding year. The increase is accounted for by larger expenditures for every classified function, with miscellaneous expenditures showing the only decline.

¹ This total, from Table 6, is slightly larger than the sum of state and local expenditures given in Table 1. The difference is accounted for by a small amount of duplication that can not be eliminated in the functional distribution.

Functional Distribution of State and Local Expenditures

The functional distribution of state and local expenditures does not change greatly from year to year, as may be seen from Tables 6 and 7. Expenditures for education and highways in the fiscal year ended in 1927 accounted for 55.9% of combined state and local net expenditures; 48.6% of gross expenditures were attributable directly to these two functions. Moreover, the available data on state and municipal indebtedness¹ indicate that if payments for debt redemption and interest on outstanding indebtedness were allotted to the respective functions for which the indebtedness was incurred, the proportion of gross state and local expenditures attributed to highways and education would be at least as large as the proportion of net expenditures accounted for by these functions.

While expenditures for protection form the greater part of federal net expenditures, expenditures of the state and local governments for this function amounted to only 10.6% of the net total for the fiscal year ended in 1927. State and local expenditures for general government and economic development are also proportionately smaller than are those of the Federal Government. For every other function except debt service, the combined expenditures of state and local governments are proportionately greater than are those of the Federal Government.

State and local expenditures for debt redemption in the fiscal year ended in 1927 amounted to \$386 millions and payments for interest to \$675 millions. Total payments for state and local debt service therefore exceeded one billion dollars. For the fiscal year ended in 1927, total interest payments of state and local governments were about \$120 millions less than the interest payments of the Federal Government. However, in view of the increase in the indebtedness of state and local governments and the decrease in the federal debt during the past two years, it is probable that at the present time state and local interest payments exceed federal payments for interest by a considerable margin.

Table 7 shows the distribution of combined state and local expenditures between the state and local governments. Cer-

¹ See pp. 41 and 43 of this volume.

TABLE 6: FUNCTIONAL DISTRIBUTION OF COMBINED GOVERNMENTAL EXPENDITURES, FISCAL YEAR 1927
(Computed by National Industrial Conference Board)

Purpose of Disbursement	Amount (in millions)			Percentage Distribution					
	Federal ¹	State ² and Local	Total	Federal ¹		State ² and Local		Total	
				Net Total	Gross Total	Net Total	Gross Total	Net Total	Gross Total
General government.....	\$333.3	\$532.2	\$865.5	15.6	8.2	7.5	6.5	9.4	7.1
Protection.....	1,427.0	748.0	2,175.0	66.6	35.0	10.6	9.2	23.6	17.8
Education.....	14.6	2,329.3	2,343.9	0.7	0.4	33.0	28.7	25.5	19.2
Highways.....	93.6	1,614.6	1,708.2	4.4	2.3	22.9	19.9	18.6	14.0
Economic development.....	159.1	67.2	226.3	7.4	3.9	1.0	0.8	2.5	1.9
Social welfare.....	55.2	1,053.0	1,108.2	2.6	1.3	14.9	13.0	12.0	9.1
Miscellaneous.....	2.3	154.4	156.7	0.1	0.1	2.2	1.9	1.7	1.3
Public utilities.....	56.3	560.4	616.7	2.6	1.4	7.9	6.9	6.7	5.1
Net total.....	\$2,141.4	\$7,059.1	\$9,200.5	100.0	52.6	100.0	86.9	100.0	75.5
Debt redemption.....	1,133.0	386.2	1,519.2	..	27.9	..	4.8	..	12.5
Interest.....	794. ^a	675.3	1,470.2	..	19.5	..	8.3	..	12.0
Gross total.....	\$4,069.3	\$8,120.6	\$12,189.9	..	100.0	..	100.0	..	100.0

¹ Federal expenditures except debt redemption on basis of checks issued. Debt redemption on basis of daily treasury statements, revised.

² Excludes federal aid except for \$9.9 millions which can not be eliminated in the functional distribution.

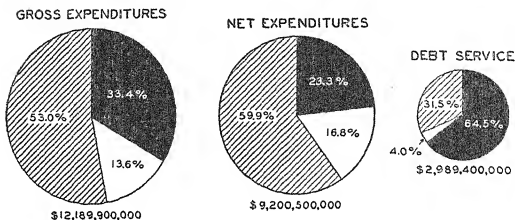
³ Includes \$7.1 millions premium on the public debt.

CHART 2: FUNCTIONAL DISTRIBUTION OF COMBINED
GOVERNMENTAL EXPENDITURES, FISCAL YEAR 1927

(National Industrial Conference Board)

■ FEDERAL □ STATE ▨ LOCAL

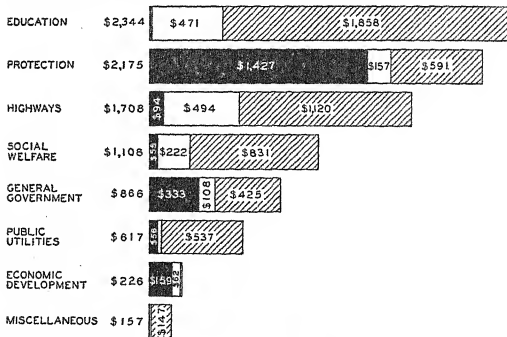
GOVERNMENTAL AGENCIES



PURPOSES OF EXPENDITURES

AMOUNTS IN MILLIONS

NET EXPENDITURES



DEBT SERVICE



TABLE 7: FUNCTIONAL DISTRIBUTION OF STATE AND LOCAL GOVERNMENTAL EXPENDITURES, FISCAL YEAR 1927

(Computed by National Industrial Conference Board)

Purpose of Disbursement	Amount (in millions)			Percentage Distribution					
	State ¹	Local ²	Total	State ¹		Local ²		Total	
				Net Total	Gross Total	Net Total	Gross Total	Net Total	Gross Total
General government.....	\$107.6	\$424.6	\$532.2	6.5	6.1	7.7	6.6	7.4	6.5
Protection.....	158.1	590.6	748.7	9.6	9.0	10.7	9.1	10.4	9.1
Education.....	482.4	1,858.3	2,340.7	29.3	27.3	33.7	28.8	32.7	28.5
Highways.....	575.0	1,120.6	1,695.6	34.9	32.5	20.3	17.3	23.7	20.6
Economic development.....	71.0	5.0	76.0	4.3	4.0	0.1	0.1	1.1	0.9
Social welfare.....	223.3	830.7	1,054.0	13.5	12.6	15.1	12.9	14.7	12.8
Miscellaneous.....	7.5	146.9	154.4	0.5	0.4	2.7	2.3	2.2	1.9
Public utilities.....	23.5	536.9	560.4	1.4	1.3	9.7	8.3	7.8	6.8
Net total.....	\$1,648.4	\$5,513.6	\$7,162.0	100.0	93.2	100.0	85.4	100.0	87.1
Debt redemption.....	42.0	344.2	386.2	..	2.4	..	5.3	..	4.7
Interest.....	78.7	596.6	675.3	..	4.4	..	9.3	..	8.2
Gross total.....	\$1,769.1	\$6,454.4	\$8,223.5	..	100.0	..	100.0	..	100.0

¹ Includes federal aid to state governments, state aid to local governments but not local aid to state governments, and \$0.1 millions of duplications which can not be eliminated in the classification.

² Includes local aid to state governments, but not state aid to local governments.

TABLE 8: FUNCTIONAL DISTRIBUTION OF STATE EXPENDITURES BY GEOGRAPHIC DIVISIONS, FISCAL YEAR 1927

(Source: U. S. Bureau of the Census, "Financial Statistics of States, 1927." Computed by National Industrial Conference Board)

Purpose of Disbursement	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific	United States
Per Cent										
General government.....	9.43	6.34	5.67	6.23	6.16	7.62	6.45	6.67	6.46	6.53
Protection.....	11.03	9.16	10.87	8.90	8.68	10.30	10.11	7.96	9.13	9.59
Education.....	13.91	30.78	29.09	28.38	23.81	28.46	36.96	34.61	39.60	29.27
Highways.....	36.65	26.05	34.29	37.48	49.02	40.14	34.57	35.18	27.30	34.88
Economic developments.....	3.33	3.78	4.97	5.42	4.03	3.00	3.58	6.59	4.73	4.31
Social welfare.....	24.78	20.49	14.70	10.23	7.93	7.67	7.96	7.62	9.65	13.55
Miscellaneous.....	0.50	0.64	0.28	0.30	0.20	0.27	0.33	1.37	0.76	0.45
Public utilities.....	0.37	2.76	0.13	3.06	0.17	2.54	0.04	..	2.37	1.42
Total.....	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

tain significant differences are immediately apparent when the functional distribution of state expenditures is compared with that of local expenditures. In the fiscal year ended in 1927, expenditures for highway purposes amounted to more than one-third of the net expenditures of the state governments but only one-fifth of local net expenditures was accounted for by this function. For every other function except economic development, the proportion of net expenditures is greater in the case of the local governments. Local expenditures for debt service are also proportionately greater than are those of the state governments.

The proportion of state net expenditures for each of the several functions varies greatly for the different geographic divisions. Table 8 shows that in three geographic divisions—the Middle Atlantic, the West South Central and the Pacific—state expenditures for education are greater in amount than highway expenditures. In the Pacific division the proportion for education amounted to 39.6% for the fiscal year ended in 1927, as compared with 27.3% for highways. At the opposite extreme is the New England division, in which state expenditures for education amounted to 13.9% of the net total, and highway expenditures to 36.7%. The expenditures for social welfare likewise show considerable variation. In the New England division this function accounted for 24.8% of state net expenditures, while in the Mountain division the proportion was only 7.6%. The proportions for other functions also vary but not so widely.

Municipal Expenditures

Table 9 shows the net expenditures of cities over 30,000 for the fiscal year ended in 1927, with the cities classified according to size. Cities having a population of more than 300,000 spend proportionately greater amounts for general government than do cities in the smaller population groups. Expenditures for highways, including streets, bridges, etc., form a larger proportion of the net expenditures of cities having a population between 30,000 and 50,000 than of any other group. As cities increase in size the proportion for this function tends to become smaller.

For the fiscal year ended in 1927, expenditures for educa-

TABLE 9: FUNCTIONAL DISTRIBUTION OF MUNICIPAL EXPENDITURES BY POPULATION GROUPS, FISCAL YEAR 1927

(Source: U. S. Bureau of the Census, "Financial Statistics of Cities, 1927." Computed by National Industrial Conference Board)

Purpose of Disbursement	Per Cent					
	All Cities of 30,000 and Over	Cities of 500,000 and Over	Cities of 300,000 to 500,000	Cities of 100,000 to 300,000	Cities of 50,000 to 100,000	Cities of 30,000 to 50,000
General government.....	5.82	6.71	6.93	3.91	4.42	3.84
Protection.....	12.59	12.33	13.34	13.14	12.72	11.74
Conservation of health.....	1.56	1.53	2.31	1.52	1.28	1.24
Sanitation or promotion of cleanliness.....	9.48	10.02	7.50	9.15	9.27	9.16
Highways.....	18.36	17.93	18.72	18.73	18.25	20.96
Charities, hospitals, and corrections.....	4.24	5.20	4.79	2.70	2.33	2.42
Education.....	28.83	25.80	27.14	32.99	36.31	34.18
Recreation.....	4.13	4.94	3.51	2.99	2.83	3.42
Miscellaneous.....	3.06	3.77	2.56	2.02	1.97	2.44
Public utilities.....	11.93	11.77	13.20	12.85	10.62	10.60
Total.....	100.00	100.00	100.00	100.00	100.00	100.00

tion amounted to 28.8% of the net expenditures of all municipalities having a population of more than 30,000. The proportion for this purpose was lower than the above figure in the two groups comprising the larger cities and greater in the three groups comprising cities with populations between 30,000 and 300,000. The proportions expended for other functions also show considerable variation, but the tendency to vary with the size of the city is less pronounced than for the functions mentioned.

CHAPTER II

PUBLIC INDEBTEDNESS

THERE is a sharp contrast in the recent trends in federal indebtedness and state and local indebtedness. While the federal debt has been reduced gradually and steadily, state and local debt has increased consistently and at a rapid rate.

The federal debt is a distinct problem and can not be considered merely as a unit forming a part of total public indebtedness, for the reason that the circumstances under which the greater part of it was incurred do not have a counterpart in the borrowing policies of the states and other smaller civil divisions. The federal debt now outstanding was incurred almost entirely in connection with our participation in the World War. From the amount of \$1,193 millions on June 30, 1913, the gross federal debt was literally catapulted by war-time conditions to the huge sum of \$25,482 millions on June 30, 1919—an increase of more than twenty-fold. A comparable state and local figure for the year in which the federal debt reached its peak is not available. However, the increase in state and local net bonded debt from 1913 to 1922 was 127.3%, the respective amounts being \$3,196 millions and \$7,264 millions.

There is another very significant reason why the trend in federal debt can not be fairly contrasted with the trend in state and local indebtedness. By far the largest part of the existing state and local debt has been incurred for the purpose of making capital outlays, which tend to increase the productive resources of the incurring governments and their citizens. On the other hand, indebtedness incurred for the purpose of carrying on military operations does not in any considerable amount add to the productive resources of the nation. Most of the federal debt now outstanding was so incurred. However, of the total state indebtedness outstanding in 1927, approximately 14% was classified under soldiers'

and sailors' relief, and the combined amounts for armories and war loans comprised less than one per cent of the state total; the indebtedness on account of all military purposes, therefore, amounted to less than 15% of the state total.

For purposes of interpretation, it is important to keep in mind the differing circumstances under which the indebtedness of the respective governments was, and is being, incurred. These differences in purpose seem to warrant separate treatment of the federal debt.

THE FEDERAL DEBT

The gross debt of the Federal Government, as indicated above, expanded more than twenty-fold during the six-year period ended in 1919. Practically the entire increase occurred during the fiscal years 1918 and 1919. The gross debt on June 30, 1917 was only \$2,976 millions; during the fiscal year ended in 1918 indebtedness increased more than four-fold, and in the fiscal year 1919 the federal debt as of June 30, 1918 was almost exactly doubled.

Reduction of the Federal Debt

Changes in the amount of federal debt outstanding at the close of each fiscal year since 1919 are shown in Table 10. During the decade ended in 1929, the gross¹ federal debt was decreased by \$8,551 millions, an amount equal to 33.6% of the gross debt as of June 30, 1919.² The retirements accomplished appear to be even more significant when they are compared in amount with the debt as of June 30, 1929. The retirements of the gross debt during the decennial period were equal to 50.5% of the 1929 gross debt. If the policies of the past decade are continued, and the rate of retirement is maintained, the entire federal debt will be extinguished in approximately twenty years.

¹ Gross debt is the sum total of the outstanding debt issues of a governmental authority. Net debt is equivalent to the gross debt minus funds available for the present and subsequent retirement of this debt—in the case of the Federal Government, its unencumbered treasury balance; in the case of the state and local governments, their sinking funds.

² For 1919 figures comparable to those given for later years in Table 10, see, "Cost of Government in the United States, 1926-1927," p. 36.

TABLE 10: CHANGES IN AMOUNT OF FEDERAL DEBT OUTSTANDING, 1920 TO 1929

(Source: Annual Reports of the Secretary of the Treasury. Computed by National Industrial Conference Board)

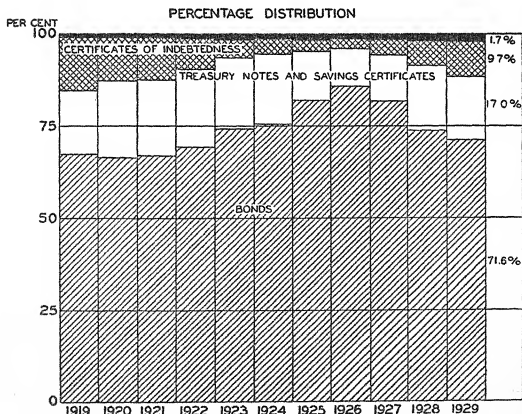
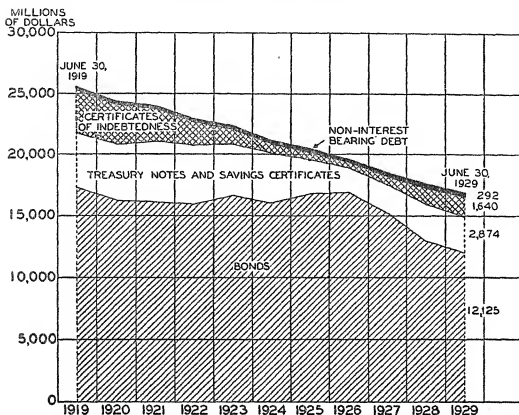
Item	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
<i>Amount (in millions)</i>										
Bonds.....	\$16,218.4	\$16,119.0	\$15,965.4	\$16,624.8	\$16,025.5	\$16,842.3	\$16,928.3	\$15,220.4	\$13,020.8	\$12,124.7
Treasury notes and savings certificates...	5,073.8	4,919.1	4,916.8	4,351.4	4,148.6	2,789.9	1,972.2	2,328.5	3,044.5	2,874.0
Certificates of indebtedness.....	2,768.9	2,699.3	1,828.8	1,031.4	807.5	578.7	483.3	702.1	1,252.4	1,640.2
Total interest-bearing debt.....	\$24,061.1	\$23,737.4	\$22,711.0	\$22,007.6	\$20,981.6	\$20,210.9	\$19,383.8	\$18,251.0	\$17,317.7	\$16,638.9
Matured debt on which interest has ceased...	6.7	10.9	25.3	98.2	30.2	30.2	13.3	14.7	45.3	50.8
Debt bearing no interest.....	230.1	228.0	227.8	243.9	239.3	275.1	246.1	244.5	241.3	241.5
Total non-interest-bearing debt.....	\$236.8	\$238.9	\$253.1	\$342.1	\$269.5	\$305.3	\$259.4	\$259.2	\$286.6	\$292.3
Gross total.....	\$24,297.9	\$23,976.3	\$22,964.1	\$22,349.7	\$21,251.1	\$20,516.2	\$19,643.2	\$18,510.2	\$17,604.3	\$16,931.2
Net balance in treasury free from encumbrances.....	def. 33.0	162.7	def. 32.3	193.8	73.1	77.0	70.5	87.9	136.7	188.4
Net debt.....	\$24,330.9	\$23,813.6	\$22,996.4	\$22,155.9	\$21,178.0	\$20,439.2	\$19,572.7	\$18,422.3	\$17,467.6	\$16,742.8
<i>Per Cent Increase (+) or Decrease (-) from Preceding Year</i>										
Bonds.....	- 5.6	-0.6	- 1.0	+ 4.1	- 3.6	+ 5.1	+ 0.5	-10.1	-14.5	- 6.9
Treasury notes and savings certificates...	+14.7	-3.0	²	-11.5	- 4.7	-32.8	-29.3	+18.1	+30.7	- 5.6
Certificates of indebtedness.....	-23.6	-2.5	-32.2	-43.6	-21.7	-28.3	-16.5	+45.3	+78.4	+31.0
Total interest-bearing debt.....	- 4.6	-1.3	- 4.3	- 3.1	- 4.7	- 3.7	- 4.1	- 5.8	- 5.1	- 3.9
Net debt.....	- 0.6	-2.1	- 3.4	- 3.7	- 4.4	- 3.5	- 4.2	- 5.9	- 5.2	- 4.1

¹ Exclusive of encumbrances against treasury balance, i. e., accrued interest, outstanding disbursing officers' and warrant checks, and other obligations not the result of borrowing.

² Decrease less than 0.05%.

CHART 3: FEDERAL DEBT OUTSTANDING, 1919 TO 1929

(National Industrial Conference Board)



During the ten-year period from July 1, 1919 to June 30, 1929, the average gross debt retired annually was \$855 millions; the average annual reduction of net debt was \$774 millions. The largest reduction effected in any single fiscal year was in 1927, the only year in which the net reduction exceeded \$1,100 millions. The percentage reduction was likewise the largest in that year, although 1928 was not far behind 1927 in this respect. When compared with the two preceding years, 1929 does not show a high percentage, the reduction in net debt being \$725 millions as compared with an average of \$1,053 millions for the two preceding years. However, the 1929 reduction was not materially less than the ten-year average of \$774 millions, and there is not sufficient evidence to conclude that the reductions accomplished annually are tending to decrease. Perhaps even a ten-year period is too short for a consideration of a trend when we are dealing with such phenomena as debt retirement and debt reduction.

Sources of Funds for Federal Debt Retirement

During the fiscal year ended June 30, 1929, the Federal Government retired \$673 millions of its gross debt. This amount was smaller than the retirements in any year since 1923. Debt retirements are based on funds from various sources—annual sinking fund appropriations, certain principal and interest payments on the indebtedness of foreign governments, internal revenue receipts specifically allocated to debt retirement, and the surplus of receipts over expenditures. In any given year additional retirements may be effected which result in an actual decrease in the net balance in the general fund. Sinking fund appropriations increase by a pre-established formula from year to year. Debt retirement funds from the other sources have varied considerably. The surplus is the principal variable, and the fluctuations in this source are largely responsible for the irregularities in the annual totals of debt retired.

The principal reason for the decrease in retirements is found in the fact that the surplus for the fiscal year ended in 1929 was materially lower than that for the preceding year, the amounts being \$393 millions for 1928 and \$188 millions

for 1929. Not only was the amount of surplus less, but a smaller proportion of it was actually used for debt retirement. The debt retirements effected out of surplus amounted to only \$124 millions during the fiscal year ended in 1929 as compared with \$366 millions in the preceding fiscal year, a decrease of almost two-thirds. A decrease in the surplus and a resulting decrease in debt retirements from this source had been anticipated, for at the beginning of the fiscal year the 1929 surplus had been estimated at only \$37 millions. Since the actual surplus amounted to over five times the estimated surplus, it was possible to retire a much larger amount of indebtedness out of surplus than had been anticipated in the budgetary plan.

Debt retirements chargeable to ordinary receipts amounted to \$550 millions for the fiscal year ended in 1929, an increase of \$9.4 millions over the preceding year. Retirements chargeable to ordinary receipts have showed an increase in each year since 1923; the percentage increase for the fiscal year ended in 1929, however, was smaller than for any year since 1923. Table 11 and Chart 4 show the sources of funds for federal debt retirement during the ten-year period from July, 1919 to June, 1929, and indicate that ordinary receipts accounted for 50.9% of the federal debt retired.

Sinking fund retirements comprise much the largest part of retirements chargeable to ordinary receipts, and have increased each year since 1920. In fact, under the provisions of the Victory Liberty Loan Act of 1919, the appropriation available for debt retirement through the sinking fund automatically increases. This Act provided that during each fiscal year there should be placed in the sinking fund a credit amounting to (1) $2\frac{1}{2}\%$ of the aggregate amount of Liberty Bonds and Victory Notes outstanding on July 1, 1920, less the par amount of any obligations of foreign governments held by the United States on July 1, 1920, plus (2) the interest which would have been payable during the fiscal year for which the appropriation is made, on the bonds purchased, redeemed, or paid out of the sinking fund during such year or in previous years. The amount appropriated to the sinking fund under the first provision is a constant, but the amount appropriated annually under the second pro-

TABLE 11: SOURCES OF FUNDS FOR FEDERAL DEBT RETIREMENT, FISCAL YEARS 1920 TO 1929
(Source: Daily Treasury Statements)

Source	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1920-1929	
											Total	Percentage Distribution
Amount (in millions)												
Sinking fund.....	..	\$261.3	\$275.9	\$284.0	\$296.0	\$306.3	\$317.1	\$333.5	\$354.7	\$370.3	\$2,799.1	32.8
Principal of foreign ob- ligations.	\$72.7	73.9	64.9	32.1	61.5	23.2	33.4	44.3	46.5	38.5	490.9	5.7
Interest on foreign ob- ligations.....	..	..	..	68.8	87.9	136.0	136.3	135.0	135.3	137.7	836.9	9.8
Internal revenue.....	6.1	87.4	81.6	18.1	12.5	1.0	0.6	6.8	3.7	3.1	221.0	2.6
Total chargeable to ordinary receipts..	\$78.8	\$422.6	\$422.4	\$403.0	\$457.9	\$466.5	\$487.4	\$519.6	\$540.2	\$549.6	\$4,347.9	50.9
Surplus.....	239.1	67.2	321.0	317.2	508.8	250.2	376.9	634.9	393.3	187.8	3,296.5	38.6
Decrease in net balance of general fund.....	866.2	..	268.8	..	131.9	18.1	8.8	..	..	..	901.6 ¹	10.5
Total available for retirements.....	\$1,184.1	\$489.8	\$1,012.2	\$720.2	\$1,098.6	\$734.8	\$873.1	\$1,154.5	\$933.5	\$737.4	\$8,546.0	100.0
Increase in net balance of general fund.....	..	173.0	..	105.8	..	..	..	21.5	27.6	64.3	..	..
Net total retirements	\$1,184.1	\$316.8	\$1,012.2	\$614.4	\$1,098.6	\$734.8	\$873.1	\$1,133.0	\$905.9	\$673.1	\$8,546.0 ²	100.0

¹ The sum of the decreases minus the sum of the increases.

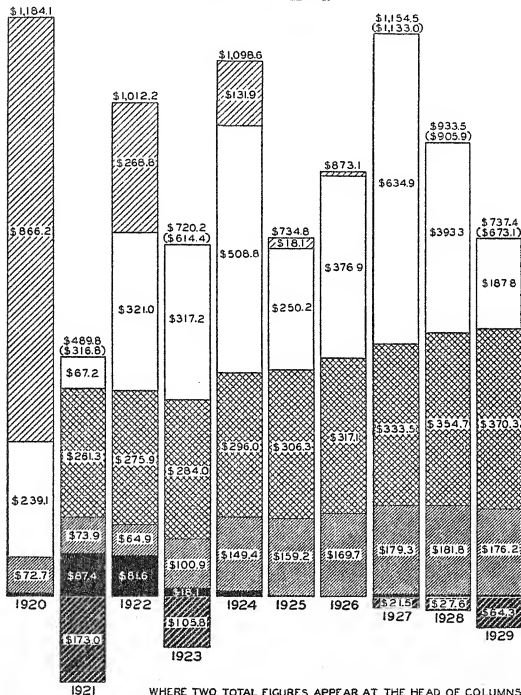
² The net change in the federal debt was \$8,550.8 millions; \$4.8 millions were written off in the fiscal year 1921 on account of fractional currency estimated as lost or destroyed.

CHART 4: SOURCES OF FUNDS FOR FEDERAL DEBT RETIREMENT, FISCAL YEARS 1920 TO 1929

(National Industrial Conference Board)



(AMOUNTS IN MILLIONS)



WHERE TWO TOTAL FIGURES APPEAR AT THE HEAD OF COLUMNS, THE LARGER REPRESENTS THE TOTAL AVAILABLE FOR RETIREMENTS WHILE THE FIGURE IN PARENTHESES REPRESENTS NET TOTAL RETIREMENTS

vision increases as the total of the debt retired increases. This second provision introduces an element of automatic acceleration into the federal retirement system, since as the total of the retired debt increases, the amount credited to the sinking fund will increase and, in turn, as the latter amount increases, the volume of retirements that can be effected through the sinking fund increases automatically. This provision thus far has had an appreciable effect upon the debt retirements of the Federal Government.

The payments of foreign governments to the United States on account of the principal of their indebtedness and the interest on this indebtedness amounted to \$199 millions during the fiscal year ended in 1929. Of this amount, \$176 millions were used to retire federal indebtedness under the provision which requires that all payments of the principal of foreign debt and payments of the interest in the form of United States securities must be used for the retirement of the federal debt. Since interest payments made in cash, by swelling the annual total of federal receipts, affect the amount of surplus, such payments may likewise be regarded as playing a part in the retirement program. The foreign debt payments applied directly to federal debt retirement are shown in Table 11, and the total foreign debt payments are shown in Table 12.

TABLE 12: DEBT PAYMENTS OF FOREIGN GOVERNMENTS TO THE UNITED STATES, FISCAL YEARS 1920 TO 1929

(Source: Daily Treasury Statements)

Year	Payments on Principal (in thousands)	Payments on Interest (in thousands)	Total Receipts on Foreign Debt Obligations (in thousands)	Total Ordinary Receipts of the Federal Government (in thousands)	Per Cent that Foreign Debt Payments are of Ordinary Receipts
1920.....	\$70,545	\$3,751	\$74,296	\$6,694,565	1.11
1921.....	83,678	31,143	114,821	5,624,933	2.04
1922.....	48,674	26,549	75,223	4,109,109	1.83
1923.....	31,657	201,332	232,989	4,007,145	5.81
1924.....	61,090	160,685	221,775	4,012,045	5.53
1925.....	23,248	160,390	183,638	3,780,149	4.86
1926.....	34,147	160,091	194,238	3,962,756	4.90
1927.....	45,700	160,389	206,089	4,129,394	4.99
1928.....	47,841	161,085	208,926	4,042,348	5.17
1929.....	38,791	160,341	199,132	4,033,250	4.94
1920-1929.	\$485,371	\$1,225,756	\$1,711,127	\$44,395,694	3.85

Internal revenue receipts specifically allocated to debt retirement have been a relatively unimportant source of funds for debt retirement in recent years; these items accounted for only \$3.1 millions of retirements in the fiscal year ended in 1929 and \$3.7 millions in the preceding year. During the ten-year period, July, 1919 to June, 1929, the retirements from this source amounted to \$221 millions. Liberty Bonds issued under the original loan acts and Victory Notes of the 1919 issue are automatically retired when received in payment of the federal estate tax. Receipts from the federal reserve bank franchise tax are earmarked to debt retirement. Receipts from the estate tax in the form of the above securities and from the reserve bank franchise tax reached a high level in the fiscal years ended in 1921 and 1922, amounting to \$87.2 millions in the former year and \$81.2 millions in the latter. In the fiscal year ended in 1929 receipts from these two items accounted for only \$2.7¹ millions of debt retirements. The federal estate tax has decreased in importance as a revenue producer and, since in recent years the option of payment in government bonds and notes has not been used to any extent, the indications are that in the immediate future this source of funds for debt retirement will be unimportant. Receipts from this tax accounted for only \$20,000 of retirements in the fiscal year ended in 1929. Likewise, it appears unlikely that receipts from the federal reserve bank franchise tax will reach the high level of 1921 and 1922 in the near future. Receipts from this tax for the fiscal year ended in 1929 were somewhat larger than in preceding years, but the amount of \$2.7¹ millions is insignificant when compared with retirements from other sources. As a whole, internal revenue receipts specifically allocated to debt retirement may be regarded as an unimportant source of funds for debt retirement.

Interest Rates and Payments

In any discussion of the federal debt and the burden incident thereto, interest rates and interest payments should have a prominent place. The interest payments made by the Federal Government have definitely shown a downward tendency during the past decade, not only because of the

¹ Rounded figures do not reveal differential amount of \$20,000 from estate tax.

reduction in the debt which has been effected, but also because of the Federal Government's policy to obtain the lowest possible rates through refunding operations. Since March, 1927, more than \$5.2 billions of the Second and Third Liberty Bond issues have been retired or refunded into securities bearing a lower rate of interest. The amounts refunded total \$2.8 billions. Prior to the time this refunding program was undertaken, \$5,265 millions of these bonds were outstanding, practically all of which were on a $4\frac{1}{4}\%$ interest basis. The refunding operations not only effected a considerable saving in the annual interest payments but accomplished another objective, in that the refunding issues have maturity and call dates that are very desirable from the standpoint of future debt retirement.

Since the refunding operations mentioned above were not completed until the early part of the fiscal year 1929, it may at first seem strange that the average rate of interest on the total interest-bearing debt increased from 3.87% on June 30, 1928 to 3.94% on June 30, 1929. The increase in the average rate of interest on the total interest-bearing debt as of June 30, 1929 was due to higher rates of interest paid on the short-term debt of the Federal Government and was the result of changed conditions in the market for short-term funds, in which market the Federal Government sells certificates of indebtedness at more or less regular intervals. On June 30, 1928, \$1,252 millions of such certificates were outstanding and their average rate of interest was 3.52%. On June 30, 1929, the certificates of indebtedness outstanding had increased to \$1,640 millions and the average rate of interest was 4.7%. Not only did the amount of short-term obligations increase materially but the increase occurred during a year in which conditions were decidedly unfavorable for short-time borrowing operations. The highest rate borne by certificates of indebtedness sold during the fiscal year ended in 1928 was 4%, while one issue sold during the year ending June 30, 1929 bore a rate of $5\frac{1}{8}\%$. The average rate on interest-bearing debt exclusive of certificates of indebtedness actually declined from 3.90% at the close of the fiscal year 1928 to 3.87% on the corresponding date in 1929. Thus it is seen that the completion of the refunding operations

tended to lighten the permanent interest burden even though the average rate on the entire interest-bearing debt temporarily increased.

The first issue of certificates of indebtedness sold during the fiscal year ending in 1930 bears a rate of $4\frac{7}{8}\%$, and the issue of December, 1929, bears a rate of $3\frac{1}{8}\%$. According to present indications the average rate on short-term obligations will be lower for the fiscal year ending in 1930 than for the preceding year.

Total interest payments on the federal debt in the fiscal year ended in 1929 amounted to \$678 millions, a decrease of \$53.4 millions from the 1928 total. Owing to the money market conditions mentioned, and the decreased debt retirements, the reduction in total interest payments was slightly less than in the preceding year.

Distribution of the Federal Interest-bearing Debt

During the past few years, the distribution of the federal debt among long-term bonds, treasury notes and savings certificates, and certificates of indebtedness has changed appreciably. On June 30, 1926, long-term bonds amounted to 87.3% of the interest-bearing debt; treasury notes and savings certificates to 10.2%; and certificates of indebtedness to 2.5%. On June 30, 1929, the proportions were, respectively, 72.9%, 17.3% and 9.8%. The 1929 proportions for long-term bonds and for treasury notes and savings certificates were slightly lower than the corresponding proportions for June 30, 1928, while the proportion for certificates of indebtedness was considerably higher. The principal facts concerning changes in the distribution of the federal debt are presented in Table 10, and Chart 3.¹

STATE AND LOCAL BORROWINGS

The state and local governments, in contrast with the Federal Government, are increasing their debt burdens. The net total of new issues during the five-year period ended in June, 1928, amounted to \$6,930 millions; an annual average of \$1,386 millions. There has been no definite trend in the

¹ See pp. 21 and 22 of this volume.

amount of new issues annually; however, new issues in 1927 amounted to \$1,475 millions, an amount somewhat larger than the total of new issues in 1926 or 1928. New issues in 1928 were almost \$100 millions less than in 1927, but were larger than in any of the three preceding years. The change in total volume of new issues from year to year is relatively small, but there is considerable variation in the amount of new issues by the different groups of issuing authorities.

As shown in Table 13, new issues by state governments have not been as large in recent years as in 1924. County borrowings, however, reached their highest level in 1927 and were almost as large in 1928. School district borrowings have shown a definite tendency to decline in amount since 1925,

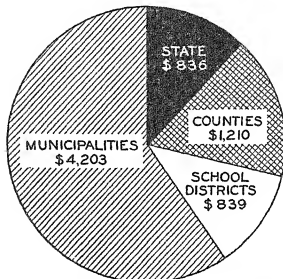
TABLE 13: STATE AND LOCAL BONDS ISSUED, CALENDAR YEARS 1924 TO 1928

(Source: *Commercial and Financial Chronicle*)

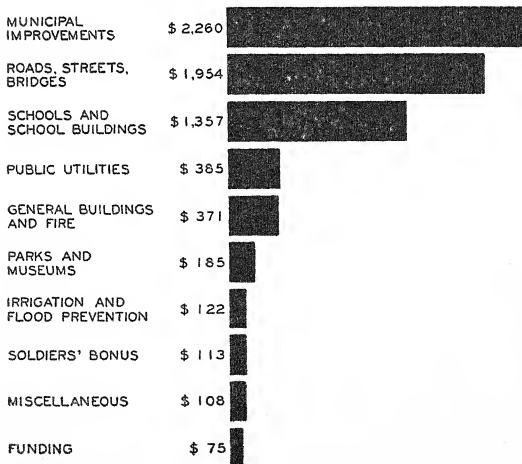
Issuing Authority	1924	1925	1926	1927	1928	Total 1924-1928
<i>Amount (in thousands)</i>						
States	\$249,517	\$161,919	\$130,574	\$131,289	\$162,492	\$835,791
Counties	206,823	229,414	204,417	287,131	282,892	1,210,677
School districts.	174,407	198,055	172,323	164,373	129,648	838,806
Municipalities and special civil divisions.	768,206	810,250	857,743	926,790	839,753	4,202,742
Gross total . . .	\$1,398,953	\$1,399,638	\$1,365,057	\$1,509,583	\$1,414,785	\$7,088,016
Refunding issues	19,315	47,545	21,516	34,617	34,796	157,789
Net total	\$1,379,638	\$1,352,093	\$1,343,541	\$1,474,966	\$1,379,989	\$6,930,227
<i>Percentage Distribution</i>						
States	17.8	11.6	9.6	8.7	11.5	11.8
Counties	14.8	16.4	15.0	19.0	20.0	17.1
School districts.	12.5	14.1	12.6	10.9	9.2	11.8
Municipalities and special civil divisions.	54.9	57.9	62.8	61.4	59.3	59.3
Gross total . . .	100.0	100.0	100.0	100.0	100.0	100.0
Refunding issues	1.4	3.4	1.6	2.3	2.6	2.2
Net total	98.6	96.6	98.4	97.7	97.4	97.8

CHART 5: STATE AND LOCAL BONDS ISSUED, CALENDAR
YEARS 1924 TO 1928, INCLUSIVE
(National Industrial Conference Board)

DISTRIBUTION OF GROSS BORROWINGS BY GOVERNMENTAL AUTHORITY
(AMOUNTS IN MILLIONS)
\$ 7,088



DISTRIBUTION OF NET BORROWINGS BY PURPOSE OF ISSUE



while the borrowings of municipalities have been somewhat irregular.

Borrowings by municipalities and special civil divisions in 1928 were greater than those of the other three groups combined. This was the case throughout the five-year period, 1924 to 1928 inclusive. However, during the last two years of this period the proportion of new issues of municipalities and special civil divisions to total new issues of state and local governments has shown a tendency to decline.

Counties borrowed heavily in both 1927 and 1928; in the latter year county borrowings were equal to 20% of the total new state and local issues.

Functional Distribution of New Borrowings

Although aggregate new issues of states and localities were about 7% less in 1928 than in 1927, new issues for six purposes were actually greater than in 1927. The borrowings for general buildings and fire prevention purposes, for harbor and water frontage, and for roads, streets and bridges, were only slightly in excess of the 1927 issues for those purposes, while new issues for parks and museums had a somewhat greater increase. Soldiers' bonus bonds in 1928 showed a substantial increase over the preceding year, and bonds issued for the purpose of obtaining funds for flood prevention activities showed a very large increase over 1927. The latter increase is, of course, attributable to the destructive floods of 1927 and 1928.

The largest proportion of new state and local bonds in 1928 was issued for roads, streets and bridges; schools and school buildings, as in previous years, ranked second. During the five-year period of 1924 to 1928 inclusive, almost 48% of new state and local issues were for these two purposes. However, in recent years, new issues for school purposes have shown a tendency to decline. Although the amount of soldiers' bonus bonds issued in 1928 was considerably greater than in 1927, there is reason to believe that the future issues for this purpose will be unimportant. California was the only state which issued soldiers' bonus bonds in 1928, as compared with two states in 1927, and five states in 1924.

In 1928 state and local bonds were issued in forty-seven states for each of three purposes: (1) schools and school buildings, (2) sewers and drainage, and (3) water. No bonds were issued in Nevada for school purposes, none were issued in Idaho for sewers and drainage, and Delaware was the only state in which additional indebtedness was not incurred for water purposes. State and local bonds were issued in California for the greatest number of purposes in 1928, including, in fact, every purpose shown in Table 14 with the single exception of funding. At the other extreme is Nevada, in which new state and local bonds were issued during 1928 for only three purposes, and for a total amount of only \$240,000. Nevada was the only state in which the total of new issues for the year amounted to less than one million dollars, a fact partly explained by its very small population.

TABLE 14: FUNCTIONAL DISTRIBUTION OF STATE AND LOCAL BONDS ISSUED, CALENDAR YEARS 1924 TO 1928

(Source: *Commercial and Financial Chronicle*)

Purpose of Issue	1924	1925	1926	1927	1928	1924-1928	
						Total	Per Cent
Amount (in thousands)							
General buildings and fire.....	\$88,662	\$58,218	\$71,002	\$74,242	\$79,019	\$371,143	5.36
Parks and museums.....	30,740	20,367	41,823	42,024	49,891	184,845	2.67
Schools and school buildings.....	288,523	323,921	260,274	266,052	218,160	1,356,930	19.58
Roads, streets, bridges.....	380,770	392,676	364,809	407,946	408,070	1,954,271	28.20
Sewers and drainage.....	94,456	130,486	108,559	123,403	115,983	572,887	8.27
Water.....	144,214	117,263	142,939	131,314	117,258	652,988	9.42
Improvements...	107,652	191,612	230,244	220,493	204,186	954,187	13.77
Electric light and gas.....	20,501	19,970	12,499	17,225	9,560	79,755	1.15
Rapid transit, ferries, canals..	25,831	12,857	45,107	88,045	83,393	255,233	3.68
Harbor and water frontage.....	26,389	15,328	17,951	34,798	35,922	130,388	1.88
Irrigation.....	19,358	22,696	13,610	8,525	2,496	66,685	0.96
Flood prevention.....	16,071	9,807	8,124	3,488	18,117	55,607	0.80
Soldiers' bonus...	72,050	7,650	4,000	13,000	16,000	112,700	1.63
Miscellaneous.....	48,143	14,105	12,008	24,149	9,342	107,747	1.55
Funding.....	16,278	15,137	10,592	20,262	12,592	74,861	1.08
Net total.....	\$1,379,638	\$1,352,093	\$1,343,541	\$1,474,966	\$1,379,989	\$6,930,227	100.00

STATE AND LOCAL DEBT

The retirements of state and local debt effected in each year since 1922 have shown an increase over the immediately preceding year. Sinking funds have likewise showed a tendency to increase. However, in no year since 1922 has the aggregate amount involved in retirements and sinking fund increases equalled the amount of new issues; it therefore follows that the total of state and local net bonded indebtedness has increased each year since 1922. The extent of the increases in recent years is summarized in Table 15. Recent annual increases in state and local net bonded debt have amounted to approximately \$900 millions. If this rate of increase is maintained for the next three years, the combined state and local debt will have been more than doubled between 1922 and 1932.

TABLE 15: COMBINED STATE AND LOCAL NET BONDED DEBT, 1913, 1922, 1925, 1926, 1927 AND 1928¹

(Computed by National Industrial Conference Board)

Year	Combined State and Local Debt (in millions)	Population ³ (in millions)	National Tangible Wealth ⁶ (in millions)	Per Capita Debt	Ratio of State and Local Debt to National Tangible Wealth (per cent)	Per Cent Increase of Actual Debt over Preceding Figure	Per Cent Increase of Per Capita Debt over Preceding Figure
1913	\$3,196.2 ²	96.5	\$190,713	\$33.11	1.7	..	..
1922	7,264.2 ²	109.9	320,804	66.10	2.3	127.3	99.6
1925	9,863.5 ⁴	115.4	355,177	85.49	2.8	35.8	29.3
1926	10,729.8 ⁴	117.1	342,471	91.60	3.1	8.8	7.1
1927	11,739.4 ⁴	118.6	336,175	98.96	3.5	9.4	8.0
1928	12,578.9 ⁴	120.0	7	104.81	..	7.2	5.9

¹ Outstanding gross bonded debt less the amounts in sinking funds.

² Figure from U. S. Bureau of the Census, "Wealth, Debt and Taxation, 1913," Vol. I.

³ Figure from U. S. Bureau of the Census, "Wealth, Debt and Taxation, 1922—Public Debts."

⁴ For computation of 1925, 1926, 1927 and 1928 figures, see Appendix A, p. 139.

⁵ Revised figures from U. S. Bureau of the Census.

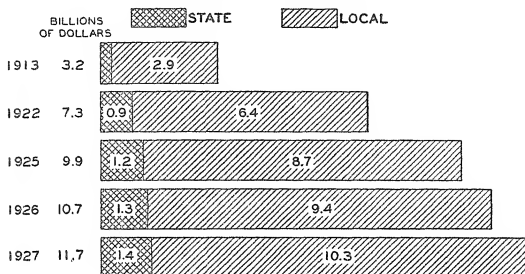
⁶ Figure from National Industrial Conference Board, *The Conference Board Bulletin*, No. 18, June 15, 1928.

⁷ Not estimated.

State and local net bonded debt in 1927 amounted to \$11,739 millions, an increase of 9.4% over the 1926 amount of \$10,730 millions. This increase was somewhat greater

CHART 6: COMBINED STATE AND LOCAL NET BONDED DEBT,
1913, 1922, 1925, 1926 AND 1927

(National Industrial Conference Board)



than the increase of 8.8% in the preceding year. In 1927, state and local net bonded debt was 61.6% greater than in 1922, while in 1922 it was 127.3% greater than in 1913.

Indices of State and Local Net Bonded Debt

The statement that state and local net bonded indebtedness increased from \$7,264 millions in 1922 to \$11,739 millions in 1927 shows that the recent increase has been very large. However, society is highly dynamic and the institution of government is no exception to the general rule. To stress changes in the amount of indebtedness without considering changes in other related phenomena would be a procedure that could hardly be justified. Having recognized the limited usefulness of mere figure facts concerning size, the aim of the statistical worker should always be to develop certain indices which will serve as a basis for interpretation. In dealing with such a subject as indebtedness of governmental divisions, adequate indices for interpretation are difficult to obtain. Per capita indebtedness and the ratio of debt to wealth seem to be the significant indices in such an analysis.

The per capita net bonded debt of state and local govern-

ments has been increasing at a rapid rate. During the fifteen-year period, 1913 to 1928, the per capita net bonded indebtedness of state and local governments more than tripled, while the actual debt in dollars increased almost four-fold. Using the 1913 figures presented in Table 15 as a base, two series of index numbers have been constructed showing the relative changes in actual net bonded debt and per capita net bonded debt. These index numbers, which are presented in Table 16, show that actual state and local net bonded debt increased 127% from 1913 to 1922 and that the 1928 net bonded debt was almost four times as large as that of 1913. The 1928 actual net bonded debt amounted to about one and three-fourths times the 1922 debt. On the other hand, per capita state and local net bonded debt approximately doubled between 1913 and 1922, while the per capita net bonded debt in 1928 was over three times as large as in 1913 and 58% greater than in 1922.

TABLE 16: RELATIVE CHANGES IN STATE AND LOCAL
NET BONDED DEBT, PER CAPITA DEBT, AND
RATIO OF DEBT TO WEALTH
(1913=100)

(Computed by National Industrial Conference Board)

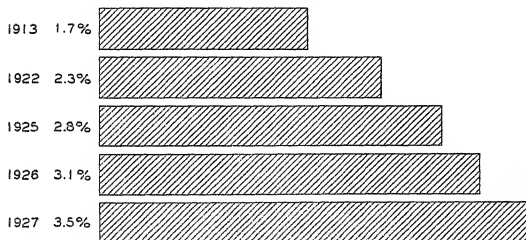
Item	1913	1922	1925	1926	1927	1928
Net bonded debt.....	100	227	309	336	367	394
Per capita debt.....	100	200	258	277	299	316
Debt to wealth.....	100	135	165	182	206	..

A series of index numbers showing relative changes in the ratio of debt to wealth is also shown in Table 16. Even though the debt to wealth index is greatly affected by price level changes, it is a more satisfactory index than per capita debt for the reason that both the actual debt and the wealth are affected by changes in the purchasing power of money. However, the effect on the former item is not as direct as on the latter because debt is affected by the purchasing power of the dollar over a period of time, while wealth is valued according to the value of the dollar at the time the valuation is made. In other words, if the price level in 1913 had been higher instead of lower than in 1922, the 1913 net bonded debt would have been larger than it actually was, for the

simple reason that more dollars would have had to have been borrowed in earlier years to accomplish the same objectives. Of course, when debt service is considered, it is the size of the debt which is significant, and from the point of view of the immediate future it is correct to regard the existing debt as consisting of so many dollars of current purchasing power. This statement, however, does not alter the fact that the size of the present debt is partly the result of previous price levels and that the future burden of the present debt will be vitally affected by changes in the price level.

CHART 7: RATIO OF STATE AND LOCAL NET BONDED DEBT TO WEALTH, 1913, 1922, 1925, 1926 AND 1927

(National Industrial Conference Board)



The significance of the debt to wealth ratio as a measure of indebtedness is clearly shown in the table. Although actual state and local net bonded indebtedness increased 127% from 1913 to 1922 and per capita net bonded indebtedness doubled, the ratio of net bonded debt to wealth was only 35% greater in 1922 than in 1913. Even more significant, however, is the tremendous increase in this ratio since 1922. A part of the increase since 1925 is due to a lowered price level, but such price changes must not be permitted to distort the real facts. As the price level declines, the burden incident to retiring and paying interest on a given volume of indebtedness unquestionably increases. If income measured in dollars declines when wealth measured in dollars declines,

there can be no doubt that the burden of indebtedness increases even though indebtedness measured in dollars remains stationary or even decreases, provided the rate of decrease is less than that of wealth and income. Unless the price level has been subjected to a very sudden and temporary disturbance, there is probably no better price level than the current one to use in estimating the future burden of indebtedness.

Distribution of State and Local Net Bonded Debt by Borrowing Authority

Local net bonded debt in recent years has been increasing more rapidly than state net bonded debt. The relative rates of increase are shown in Table 17. In 1927 the net bonded indebtedness of states amounted to 11.7% of combined state and local net bonded debt, as compared with 12.1% in 1922. A rather definite tendency of state debt to increase less rapidly than local debt was in evidence from 1925 to 1927.

Since state bonds issued in 1928 were greater in amount than in any year since 1924, it is probable that the state proportion of the combined state and local net bonded debt was greater in 1928 than in 1927. Retirements of state bonds in 1928 were somewhat larger than in 1927, but since the retirements of local bonds were also larger, the first conclusion is not affected by this fact. Local net bonded indebtedness in 1927 amounted to 88.3% of combined state and local net bonded debt, a slightly higher proportion than in 1922 and 1925, but considerably lower than the proportion of 91% in 1913. The net bonded indebtedness in 1925, 1926 and 1927 of cities over 30,000 was greater than that of all other local civil divisions combined, but the proportion of the total was lower in 1927 than in the two preceding years. This change was largely due to the heavy borrowings of counties.

The per capita net bonded indebtedness of states increased by \$0.67 in 1927. This was a larger increase than in the preceding year, but not so large as the average annual increase during the three years 1923, 1924 and 1925. The per capita net bonded indebtedness of cities over 30,000¹ in 1927

¹ It should be remembered that additional cities are added from time to time to the group having a population over 30,000.

TABLE 17: DISTRIBUTION OF NET BONDED DEBT BETWEEN STATE AND LOCAL GOVERNMENTS, 1913, 1922, 1925, 1926 AND 1927

(Computed by National Industrial Conference Board)

Borrowing Authority	1913	1922	1925	1926	1927
<i>Amount (in thousands)</i>					
States.....	\$287,856	\$879,075	\$1,202,072	\$1,274,737	\$1,370,646
Cities over 30,000.....	1,948,852	3,146,280	4,486,057	4,923,120	5,325,555
Other local governments.	959,450	3,238,842	4,175,367	4,531,939	5,043,190
Total local.....	\$2,908,302	\$6,385,122	\$8,661,424	\$9,455,059	\$10,368,745
Combined state and local	\$3,196,158	\$7,264,197	\$9,863,496	\$10,729,796	\$11,739,391
<i>Percentage Distribution</i>					
States.....	9.0	12.1	12.2	11.9	11.7
Cities over 30,000.....	61.0	43.3	45.5	45.9	45.3
Other local governments	30.0	44.6	42.3	42.2	43.0
Total local.....	91.0	87.9	87.8	88.1	88.3
Combined state and local	100.0	100.0	100.0	100.0	100.0
<i>Per Capita</i>					
States ¹	\$2.97	\$8.00	\$10.42	\$10.88	\$11.55
Cities over 30,000 ²	64.54	81.22	110.07	117.67	124.67
Combined state and local ³	33.11	66.10	85.49	91.60	98.96

¹ Population estimates as of July 1 (Census Bureau).² Population estimates as of middle of fiscal years ending in calendar years as given.³ Population for 1913 from U. S. Bureau of the Census, "Estimates of Population in the United States." Population figures used for other years are the Census Bureau's estimates as of July 1.

was 6% greater than in 1926 and 53.5% greater than in 1922. Since 1913 the increase in per capita net bonded indebtedness of cities over 30,000 has not been as great as the increases in per capita state net bonded debt and combined state and local net bonded debt. This was to be expected, since of the local civil divisions it was the larger cities that first used their credit to any considerable extent. While the per capita net bonded indebtedness in 1927 of cities over 30,000 was not quite twice their per capita indebtedness in 1913, the combined state and local per capita net bonded debt in 1927 was almost three times as large as that in 1913.

Functional Distribution of State and Municipal Debt

There is little change from year to year in the functional distribution of total state debt. Forty-eight political divisions are involved, and there is a tendency for state differences to offset one another, as is clearly indicated in the two right-hand columns of Table 18. In only three cases did the change in proportion from 1926 to 1927 amount to one per cent or more of the total state debt; of these three, outstanding debt for soldiers' and sailors' relief and for funding and refunding showed declines, and public utilities showed an increase. Considerable variation in the total and proportion of debt for funding and refunding purposes is to be expected, since funding operations are dependent upon conditions in the investment markets.

Highways accounted for more than one-half of state debt in 1927, as in 1926. The proportion of total state debt attributed to highways, however, has shown a tendency to decline in recent years. Debt for this purpose amounted to 53.2% of total state debt in 1925, to 51.6% in 1926 and 51.1% in 1927. While borrowings for highway purposes continue to be large, the development in recent years of taxes such as the gasoline tax, the revenues from which are allotted wholly or in large part to highway construction and maintenance, have enabled the state governments to meet a larger part of highway expenditures from ordinary receipts.

Only two other functions account for as much as 10% of state debt—public utilities and soldiers' and sailors' relief. Each of these functions accounted for 13.9% of the state debt as of 1927. The outstanding debt for public utility purposes has been increasing, both relatively and absolutely, in recent years. Of the total state debt outstanding, 10.3% was attributable to this function in 1925, 12% in 1926, and 13.9% in 1927. Soldiers' and sailors' relief shows the opposite tendency; 18% of total state debt was attributable to this function in 1925, as compared with only 13.9% in 1927.

When total state debt is divided according to geographic divisions, surprising variations are found in the functional distribution, as is indicated by Table 18. Highways in 1927 accounted for more than one-half of the total state debt in only five of the nine geographic divisions. Since in two

TABLE 18: FUNCTIONAL DISTRIBUTION OF STATE DEBT, BY GEOGRAPHIC DIVISIONS, 1927¹

(Source: U. S. Bureau of the Census, "Financial Statistics of States" series)

Function	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific	United States, 1926	United States, 1927
<i>Per Cent</i>											
1. General government buildings.	3.4	0.2	..	..	0.6	1.9	..	9.0	4.6	1.0	1.3
2. Armories.	1.7	2	..	0.3	..	..	..	0.3	..	0.3	0.2
3. Agricultural purposes.	..	..	0.8	..	3.1	..	..	..	6.8	1.4	1.3
4. Highways.	19.8	74.7	54.8	20.7	61.9	28.2	9.2	55.3	51.6	51.6	51.1
5. Charities, hospitals and corrections.	6.5	0.9	0.2	..	0.5	4.0	6.7	3.9	..	1.0	1.3
6. Schools, including colleges.	1.1	0.2	0.1	1.1	5.6	5.1	5.0	10.8	1.9	1.6	2.0
7. Parks and reservations.	9.7	2.7	..	2	..	..	..	0.2	..	1.4	1.7
8. Public utilities.	32.3	7.4	2	46.5	1.5	7.7	0.4	..	15.8	12.0	13.9
9. Soldiers' and sailors' relief and homes.	2.7	10.0	36.5	28.2	..	..	3.7	2	19.0	15.3	13.9
10. War loans.	1.4	..	2.0	..	0.1	..	..	1.0	..	0.4	0.5
11. Combined or unreported purposes.	9.9	2.4	5.6	1.6	11.8	38.1	48.1	6.0	0.3	7.0	7.1
12. Miscellaneous.	11.5	1.5	2	1.6	3.5	1.3	..	7.1	..	2.5	2.6
13. Funding and refunding.	..	..	..	..	11.4	13.7	26.9	6.4	..	4.5	3.1
Total.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ Includes funded, floating and special assessment debt.

² Less than 0.05%.

geographic divisions the largest percentage of state debt is listed under the heading "Combined or unreported purposes," it is possible that if a complete functional allocation were made, more than half of the total state debt in each of these two divisions might be attributable to highway purposes. The remaining two groups, New England and West North Central, have incurred the largest part of their debts for public utility purposes. Since the New England states, individually and collectively, are small in area, one would expect their indebtedness for highways to be proportionally smaller than that of certain other divisions. The area of Maine is, of course, quite considerable but a large part of it is remote from main routes of travel and sparsely populated.

Table 19 shows the indebtedness of cities over 30,000, by geographic divisions. Municipal indebtedness shows a much greater similarity in functional distribution than does state debt. There are, however, certain significant variations from the average. For example, municipalities in the Mountain and Pacific states have borrowed for public utility purposes to a relatively greater extent than have municipalities in other sections of the United States. In three other geographic divisions public utilities account for the largest amount of municipal indebtedness, but this function does not predominate as it does in the two western groups. In two geographic divisions the largest percentage of municipal debt is accounted for by highways, and in the remaining two divisions by school buildings.

Table 20 shows the functional distribution of municipal debt, with the cities classified according to size. As in the case of the geographical classification, the variation of the groups from the average for the United States is relatively small. There are, however, certain tendencies revealed that are significant. Public utilities alone account for 25.6% of the debt of cities over 30,000. As cities decrease in size, there seems to be a tendency for a relatively smaller proportion of debt to be incurred for this function. It will be observed that cities having a population of less than 100,000 have incurred the largest proportion of their indebtedness for school buildings, while all three of the groups comprising cities having populations in excess of 100,000 have incurred

TABLE 19: FUNCTIONAL DISTRIBUTION OF DEBT OF CITIES OVER 30,000, BY GEOGRAPHIC DIVISIONS, 1927¹
(Source: U. S. Bureau of the Census, "Financial Statistics of Cities" series. Computed by National Industrial Conference Board)

Function	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific	United States
<i>Per Cent</i>										
1. General government buildings.....	2.1	1.9	1.3	1.8	2.0	0.8	1.1	1.4	4.0	1.9
2. Police and fire departments.....	1.6	1.4	1.2	1.4	1.3	1.5	1.3	^a	1.7	1.3
3. Sewers and sewage disposal.....	15.5	7.4	17.6	10.1	15.4	11.6	13.9	5.3	4.7	12.0
4. Highways.....	21.7	21.6	21.2	20.0	25.9	16.4	16.4	18.2	5.5	19.5
5. Charities, hospitals and corrections.....	1.4	2.7	2.2	1.7	0.7	2.0	0.4	..	0.6	1.8
6. School buildings.....	20.6	21.4	18.5	27.8	16.1	22.7	18.6	24.2	23.8	20.7
7. Libraries, art galleries and museums.....	0.2	1.5	0.9	0.4	0.2	0.9	0.3	..	0.7	0.9
8. Parks and playgrounds.....	4.6	3.7	8.0	4.1	1.4	2.7	2.8	0.8	2.3	4.5
9. Public utilities.....	28.5	23.9	16.7	23.1	25.0	18.6	25.7	42.9	51.4	25.6
10. Municipal service enterprises.....	0.1	0.1	0.9	0.3	0.2	0.4	..	..	..	0.3
11. Combined or unreported purposes.....	0.7	10.0	8.4	5.7	5.0	10.5	2.0	2.7	2.4	6.7
12. Miscellaneous.....	1.3	3.0	2.2	2.2	2.2	5.8	6.9	^a	2.3	2.7
13. Funding and refunding.....	1.7	1.4	0.9	1.4	4.6	6.1	10.6	4.5	0.6	2.1
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ Includes funded, floating and special assessment debt.

² Excluding New York City.

^a Less than 0.05%.

TABLE 20: FUNCTIONAL DISTRIBUTION OF MUNICIPAL DEBT,
1927; CITIES CLASSIFIED ACCORDING TO SIZE¹

(Source: "Financial Statistics of Cities, 1927")

Function	All Cities over 30,000 ²	Cities over 500,000 ²	Cities of 300,000 to 500,000	Cities of 100,000 to 300,000	Cities of 50,000 to 100,000	Cities of 30,000 to 50,000
<i>Per Cent</i>						
1. General government buildings	1.9	2.2	1.8	1.3	2.3	1.4
2. Police and fire departments...	1.3	1.6	0.9	1.3	1.4	0.9
3. Sewers and sewage disposal...	12.0	14.4	8.3	11.0	10.4	11.6
4. Highways.....	19.5	18.9	16.9	19.4	22.6	25.9
5. Charities, hospitals, and corrections.....	1.8	2.6	2.9	0.5	0.8	0.5
6. School buildings.....	20.7	14.6	19.2	25.0	31.2	28.2
7. Libraries, art galleries, and museums.....	0.9	1.7	0.2	0.3	0.3	0.1
8. Parks and playgrounds.....	4.5	6.3	4.7	2.8	2.5	2.6
9. Public utilities.....	25.6	27.3	26.7	26.9	18.6	18.4
10. Municipal service enterprises.	0.3	0.6	³	0.1	0.1	0.4
11. Combined or unreported purposes.....	6.7	6.8	10.3	6.3	3.6	3.8
12. Miscellaneous.....	2.7	2.4	3.9	2.5	2.3	3.4
13. Funding and refunding.....	2.1	0.6	4.2	2.6	3.9	2.8
Total.....	100.0	100.0	100.0	100.0	100.0	100.0

¹ Includes funded, floating and special assessment debt.² Excluding New York City.³ Less than 0.05%.

the largest part of their indebtedness for public utilities. In the case of the cities under 100,000, public utilities rank third as a debt function. As cities increase in size, adequate public utilities' service naturally becomes a more pressing problem, and it is to be expected that the capital outlays necessary to provide adequate service increase. These factors are reflected in the relatively greater debt for public utility purposes in the larger cities.

There is only a very slight variation from year to year in the functional distribution of municipal debt. In recent years the variation has been extremely small, much less, in fact, than the variation in state debt. As indebtedness of municipalities increases in amount, smaller variations are to be expected, since it requires a constantly larger amount of debt to cause a given percentage change in debt for a particular function.

State and Local Net Bonded Debt in Individual States

Tables 21 and 22 and Chart 8 show the net bonded debt of the state and local governments, by individual states and geographic divisions for selected years, together with ratios to population and wealth. The latter have been used to provide measures of debt burden.

The state and local net bonded debt of New York in 1927 amounted to \$2,012 millions, an amount more than twice as large as that of Pennsylvania, the second state. The Middle Atlantic division, comprised of the two states mentioned and New Jersey, accounted for 30% of the total state and local net bonded debt in 1927. Nevada, with a total debt of \$7.6 millions in 1927, had a smaller state and local net bonded debt than any other state; and the Mountain division, the state and local indebtedness of which was only \$413 millions in 1927, had a lower total than any other geographic division. The total state and local net bonded indebtedness of particular states and geographic divisions, however, is not as significant as is their indebtedness measured by population and wealth. Accordingly, most attention will be devoted here to a consideration of the state and local net bonded indebtedness of particular states and geographic divisions in relation to these factors.

As previously mentioned, the per capita state and local net bonded debt in 1927 was \$98.96, an increase of almost 50% over the 1922 per capita indebtedness. During the period since 1913, significant changes in per capita net bonded debt have occurred. The number of states having per capita state and local bonded debt in excess of \$100 increased from one in 1913 to four in 1922, and to fifteen in 1927. Florida in recent years outranks all the other states in per capita state and local debt, which in 1927 amounted to \$341.26, an amount considerably greater than that of the second state, California. New York dropped between the years 1922 and 1927 from first to third place in per capita net bonded debt. In 1927, as in 1922, the Pacific division led in per capita net bonded state and local debt, the Middle Atlantic group ranked second, and the Mountain group retained third place. Because of the large increase in state and local indebtedness in Florida, and the very considerable increases in several other states of the

TABLE 21: COMBINED STATE AND LOCAL NET BONDED DEBT, BY

(Computed by National

States and Geographic Divisions	Net Bonded Debt (in thousands)					Per Capita Net Bonded Debt		
	1913 ¹	1922 ²	1925 ³	1926 ⁴	1927 ³	1913 ¹	1922 ²	1927 ³
Maine.....	\$21,168	\$38,816	\$39,955	\$43,977	\$46,928	\$38.19	\$50.02	\$59.18
New Hampshire.....	9,259	12,852	14,034	15,059	15,866	21.39	28.75	33.38
Vermont.....	5,128	7,085	8,478	8,869	8,786	14.45	20.10	24.93
Massachusetts.....	256,591	296,604	352,798	361,633	374,816	72.75	74.32	88.36
Rhode Island.....	26,679	41,202	51,922	56,139	66,130	47.38	64.38	93.93
Connecticut.....	42,799	85,767	103,647	106,579	111,157	35.59	58.66	67.94
New England.....	361,664	482,326	571,234	592,256	623,003	52.93	62.90	76.14
New York.....	986,120	1,536,130	1,734,194	1,855,556	2,012,497	103.43	142.98	176.18
New Jersey.....	132,752	298,886	438,586	419,564	572,125	48.42	89.35	152.61
Pennsylvania.....	223,467	508,176	731,741	848,648	930,796	27.89	56.20	95.66
Middle Atlantic.....	1,342,336	2,343,192	2,924,521	3,223,768	3,515,418	66.16	101.30	141.17
Ohio.....	210,555	545,704	659,954	669,641	704,801	41.33	90.02	105.04
Indiana.....	58,550	138,877	186,045	191,375	202,572	21.09	46.29	64.25
Illinois.....	88,633	217,610	407,216	427,030	482,411	14.98	32.27	66.12
Michigan.....	48,936	301,716	472,764	518,496	598,787	15.82	76.77	133.36
Wisconsin.....	32,899	96,097	126,337	151,575	148,021	13.53	35.29	50.73
East North Central.....	439,593	1,300,004	1,852,316	1,938,117	2,136,392	22.76	57.88	86.97
Minnesota.....	46,263	165,750	201,080	198,810	199,822	21.23	66.78	74.39
Iowa.....	23,626	112,770	158,271	162,458	173,532	10.34	46.50	71.56
Missouri.....	53,697	95,645	170,314	196,594	216,297	16.13	27.82	61.62
North Dakota.....	4,817	20,386	14,166	14,437	11,530	8.03	31.66	17.98
South Dakota.....	6,928	38,843	40,524	43,596	42,851	11.52	59.03	61.57
Nebraska.....	27,227	77,253	99,477	105,889	112,159	21.20	58.17	80.34
Kansas.....	38,423	88,329	141,323	145,859	151,654	22.38	49.35	82.96
West North Central.....	200,981	598,376	825,155	867,762	907,836	16.84	46.92	68.87
Delaware.....	6,610	22,150	29,680	31,656	31,869	31.60	96.72	131.15
Maryland.....	58,425	117,063	149,580	169,919	190,637	43.40	78.20	119.37
District of Columbia.....	7,610	156				20.78	0.33	
Virginia.....	59,803	113,389	141,915	155,001	158,193	27.90	47.63	62.13
West Virginia.....	8,664	67,725	109,293	116,517	127,630	6.67	44.03	75.25
North Carolina.....	31,071	159,940	327,156	362,821	415,943	13.38	59.97	143.58
South Carolina.....	18,921	50,562	67,143	70,419	87,866	12.04	29.14	47.62
Georgia.....	30,084	56,622	57,062	64,606	69,405	11.13	18.98	21.89
Florida.....	13,527	86,204	234,818	364,975	465,138	16.42	77.52	341.26
South Atlantic.....	234,755	674,011	1,118,647	1,335,914	1,546,681	18.36	46.11	97.29
Kentucky.....	25,502	38,180	46,062	53,024	58,941	10.94	15.55	23.22
Tennessee.....	55,653	119,880	145,623	154,613	179,572	24.90	50.26	72.26
Alabama.....	36,532	57,314	94,262	107,104	125,871	16.55	23.76	49.38
Mississippi.....	26,062	91,759	116,600	125,942	133,872	14.52	51.24	74.76
East South Central.....	143,749	307,133	402,547	440,683	498,256	16.77	33.97	53.22
Arkansas.....	8,130	9,900	19,396	22,954	39,612	4.98	5.48	20.60
Louisiana.....	68,066	113,857	154,666	165,428	179,468	39.96	61.81	92.80
Oklahoma.....	37,307	109,274	124,794	129,262	143,824	20.96	51.04	60.33
Texas.....	77,023	339,708	470,235	501,247	571,500	18.56	69.37	105.89
West South Central.....	190,526	572,739	769,091	818,891	934,404	20.56	53.59	80.29
Montana.....	11,319	50,284	56,519	56,575	57,121	26.13	83.67	80.00
Idaho.....	8,603	42,220	48,030	47,750	47,205	23.85	90.99	88.40
Wyoming.....	3,513	16,816	25,248	25,874	27,114	21.69	80.46	112.51
Colorado.....	20,920	77,778	130,205	138,724	140,880	24.74	79.12	131.17
New Mexico.....	6,340	15,133	19,886	22,581	25,701	18.75	40.90	65.36
Arizona.....	9,254	39,329	51,327	57,922	63,591	37.43	105.16	142.90
Utah.....	10,771	42,199	42,628	41,690	41,585	27.03	89.22	79.66
Nevada.....	2,390	6,760	6,809	6,076	7,562	29.73	87.33	97.70
Mountain.....	73,110	290,519	380,652	397,192	412,759	25.51	81.80	102.84
Washington.....	54,800	121,473	157,101	169,735	174,295	45.18	85.42	111.58
Oregon.....	19,398	106,607	128,645	139,281	147,200	27.35	130.45	165.39
California.....	135,266	467,817	733,587	806,197	843,147	49.65	124.85	190.20
Pacific.....	209,464	695,897	1,019,333	1,115,213	1,164,642	45.08	116.25	169.16
United States.....	\$3,196,158	\$7,264,197	\$9,863,496	\$10,729,796	\$11,739,391	\$33.11	\$66.10	\$98.96

¹ U. S. Bureau of the Census, "Wealth, Debt and Taxation—1913."² U. S. Bureau of the Census, "Wealth, Debt and Taxation—1922."³ Estimated by National Industrial Conference Board. For method of estimating, see Appendix A, p. 139.⁴ Population figures from U. S. Bureau of the Census, "Estimates of Population of the United States."

STATES AND GEOGRAPHIC DIVISIONS, 1913, 1922, 1925, 1926 AND 1927

Industrial Conference Board)

Rank of States and Divisions by Size of Per Capita Net Bonded Debt			Ratio of Net Bonded Debt to Wealth (per cent)			Rank of States and Divisions by Ratio of Net Bonded Debt to Wealth			Increase or Decrease (-) of Net Bonded Debt (per cent)			
1913	1922	1927	1913 ^a	1922 ^a	1927 ^a	1913	1922	1927	1913-1922	1922-1927	1925-1926	1926-1927
14	31	39	2.11	1.93	2.21	12	27	33	83.37	20.90	10.07	6.71
26	42	43	1.43	0.94	1.04	22	45	46	38.21	18.16	7.31	0.85
39	45	44	1.03	0.84	1.00	31	46	47	38.16	24.02	-0.10	-0.93
2	18	21	4.09	2.28	2.72	1	22	26	15.59	26.37	2.50	3.65
5	21	18	2.74	2.14	3.25	5	24	21	54.44	60.50	8.12	17.80
11	25	31	1.82	1.62	1.97	16	32	38	100.39	29.60	2.23	4.29
(2)	(4)	(7)	3.08	1.98	2.41	(1)	(7)	(8)	33.36	29.17	3.68	5.19
1	1	3	3.94	4.15	5.23	2	2	6	55.78	31.01	7.00	8.46
4	8	5	2.23	2.53	4.58	9	18	11	125.15	91.42	13.30	10.12
16	27	17	1.40	1.76	3.07	24	30	22	127.41	83.16	15.98	9.68
(1)	(2)	(2)	2.86	3.02	4.33	(2)	(1)	(4)	74.56	50.03	10.23	9.05
8	7	15	2.34	2.95	3.60	8	11	17	159.17	29.15	1.47	5.25
28	35	34	1.10	1.57	2.19	29	33	34	137.19	45.72	2.86	5.75
37	39	32	0.58	0.98	2.09	43	43	35	145.46	121.69	4.87	12.97
36	17	8	0.93	2.65	4.94	36	17	8	516.55	98.46	9.67	15.49
40	38	40	0.77	1.22	1.79	40	40	39	192.10	54.03	4.15	12.50
(5)	(5)	(5)	1.12	1.89	2.95	(7)	(8)	(7)	195.73	64.34	4.63	10.23
27	20	28	0.86	1.94	2.24	38	26	32	258.28	20.56	-1.13	0.51
46	34	30	0.31	1.07	1.60	48	41	41	374.77	54.70	2.65	6.82
35	43	36	0.95	0.96	2.06	35	44	36	78.12	126.15	15.67	9.80
47	40	48	0.23	0.83	0.46	49	47	48	323.21	-43.44	2.05	-20.24
43	24	37	0.53	1.33	1.38	45	38	44	460.67	10.32	7.58	-1.71
24	26	23	0.74	1.45	2.04	41	35	37	183.74	45.17	6.14	6.22
23	32	22	0.85	1.41	2.35	39	37	31	129.89	71.69	3.21	3.97
(8)	(7)	(8)	0.66	1.30	1.90	(9)	(9)	(9)	197.73	51.72	3.16	4.62
12	5	10	2.20	3.54	4.79	10	3	9	235.10	43.88	6.66	0.67
7	15	11	2.65	2.95	4.54	6	12	12	100.36	62.85	13.60	12.19
30	49	40	0.65	0.01	0.01	42	49	49	-97.95			
15	33	35	2.53	2.32	3.05	7	21	23	89.94	39.27	7.70	2.06
48	36	26	0.36	1.45	2.58	47	36	28	679.88	88.45	6.61	9.54
41	23	6	1.89	3.52	8.52	14	5	2	414.76	160.06	10.90	14.64
42	41	42	1.53	2.10	3.46	19	25	19	167.23	73.78	4.88	24.78
44	46	46	1.42	1.45	1.69	23	34	40	88.21	22.58	13.22	7.43
34	16	1	1.47	3.53	17.76	21	4	1	537.27	439.58	55.43	27.44
(7)	(8)	(4)	1.63	2.31	5.00	(4)	(6)	(1)	187.14	129.47	19.42	15.78
45	47	45	1.14	1.07	1.58	30	42	42	49.71	54.38	15.12	11.16
20	30	29	3.02	2.84	3.98	4	13	16	115.41	49.79	6.17	16.14
33	44	41	1.85	1.91	4.03	15	28	15	56.89	119.62	13.62	17.52
38	28	27	2.16	4.21	5.84	11	1	3	252.08	45.90	8.01	6.30
(9)	(9)	(9)	1.98	2.36	3.65	(3)	(5)	(5)	113.66	62.23	9.47	13.06
49	48	47	0.48	0.38	1.46	46	48	43	21.77	300.12	18.35	72.57
9	22	19	3.48	3.33	5.00	3	7	7	67.27	57.63	6.96	8.49
29	29	38	1.21	2.74	3.51	28	16	18	192.90	31.62	3.58	11.27
32	19	14	1.22	3.45	5.57	27	6	4	341.05	68.23	6.59	14.02
(6)	(6)	(6)	1.46	2.88	4.52	(6)	(3)	(3)	200.61	63.15	6.48	14.11
19	12	24	1.01	2.26	2.43	32	23	30	344.24	13.60	0.10	0.96
22	6	20	1.51	2.75	2.87	20	14	25	390.76	11.81	-0.58	-1.14
25	13	12	1.00	1.72	2.58	33	31	27	378.68	61.24	2.48	4.79
21	14	9	0.91	2.41	4.22	37	19	13	271.79	81.13	6.54	1.55
31	37	33	1.30	1.78	2.87	26	29	24	138.69	69.83	13.55	13.82
10	4	7	2.05	2.99	4.64	13	10	10	324.99	66.78	12.85	13.24
18	9	25	1.37	2.75	2.56	25	15	29	291.78	-1.46	-2.20	-0.25
13	10	16	0.53	1.25	1.37	44	39	45	182.85	11.87	-10.77	24.47
(4)	(3)	(3)	1.12	2.38	3.21	(8)	(4)	(6)	297.37	42.08	4.35	3.92
6	11	13	1.74	2.37	3.26	17	20	20	121.67	43.48	8.04	2.69
17	2	4	0.95	3.12	4.11	34	8	14	449.58	38.08	8.27	5.69
3	3	2	1.60	3.11	5.33	18	9	5	245.85	80.23	9.90	4.58
(3)	(1)	(1)	1.54	2.95	4.71	(5)	(2)	(2)	232.23	67.36	9.41	4.43
..	..	..	1.75	2.31	3.56	..	..	..	127.28	61.61	8.78	9.41

^a Population figures from U. S. Bureau of the Census, revised estimates.

^b Wealth figures from U. S. Bureau of the Census, "Estimated National Wealth—1922."

^c Wealth figures estimated by National Industrial Conference Board.

TABLE 22: DISTRIBUTION OF NET BONDED DEBT BETWEEN STATE AND 1922, 1925,

(Source: U. S. Bureau of the Census, "Financial Statistics of States

States and Geographic Divisions	1913			1922			1925		
	State Debt (in thousands)	Total Local Debt (in thousands)	Cities 30,000 and over (in thousands)	State Debt (in thousands)	Total Local Debt (in thousands)	Cities 30,000 and over (in thousands)	State Debt (in thousands)	Total Local Debt (in thousands)	Cities 30,000 and over (in thousands)
Maine.....	81	\$21,167	\$7,519	\$12,654	\$26,162	\$5,469	\$14,081	\$25,874	\$10,138
New Hampshire.....	1,211	8,088	1,090	3,018	9,834	4,606	1,685	13,349	5,289
Vermont.....		5,128		2,112	4,975		1,842	7,036	
Massachusetts.....	78,883	177,708	140,076	75,968	220,636	176,712	25,211	327,587	204,995
Rhode Island.....	4,907	21,772	17,735	9,338	31,864	26,268	10,372	41,550	34,393
Connecticut.....	7,064	35,735	16,890	6,045	79,722	45,954	4,136	99,511	60,055
New England.....	92,066	269,598	183,310	109,135	373,191	259,009	56,327	194,907	314,870
New York.....	84,451	901,669	828,897	186,515	1,349,615	1,213,474	227,459	1,506,735	1,341,866
New Jersey.....		132,752	72,196	16,349	282,537	136,975	51,316	407,270	191,707
Pennsylvania.....	(64,31)	224,107	151,134	48,993	459,183	248,954	61,925	666,816	455,586
Middle Atlantic.....	83,808	1,258,528	1,052,227	251,857	2,091,335	1,599,403	343,700	2,580,821	1,989,159
Ohio.....	(157,1)	210,712	129,467	29,583	516,121	235,214	18,752	641,202	368,893
Indiana.....	655	57,895	9,272	426	138,451	17,847	1,335	184,710	58,947
Illinois.....	17	88,636	61,862	12,738	204,872	77,973	125,838	281,378	194,552
Michigan.....	..	48,936	17,577	49,205	232,511	147,302	74,494	398,270	241,086
Wisconsin.....	..	32,899	13,372	2,164	95,933	41,021	1,864	124,473	58,122
East North Central.....	515	439,078	231,550	94,116	1,205,888	519,357	222,283	1,630,033	921,600
Minnesota.....	900	45,363	30,872	19,476	146,274	53,562	14,717	186,363	74,916
Iowa.....		23,626	9,693	185	111,985	16,369	19,061	139,210	33,559
Missouri.....	181	53,516	33,946	30,308	65,337	19,993	51,278	119,036	54,548
North Dakota.....	820	3,997	..	5,614	14,772	..	4,067	10,099	..
South Dakota.....	..	6,928	..	14,421	24,422	..	15,474	25,050	..
Nebraska.....	..	27,127	15,522	..	77,253	13,014	99,477	..	35,274
Kansas.....	243	38,120	9,188	..	88,329	10,512	26,700	114,617	21,150
West North Central.....	2,144	198,837	99,221	70,004	528,372	113,450	131,303	693,852	219,447
Delaware.....	501	6,109	3,992	5,798	16,352	9,278	7,313	22,367	10,076
Maryland.....	7,334	51,691	46,326	21,929	95,134	82,277	21,803	127,777	101,343
District of Columbia.....		7,610	7,610		156	156			
Virginia.....	19,483	40,320	23,001	21,206	92,383	58,180	17,602	116,613	82,792
West Virginia.....	7,533	6,684	1,626	24,181	43,544	5,331	38,408	70,885	8,958
North Carolina.....	2,333	23,538	2,155	33,326	126,614	10,836	91,522	235,634	25,442
South Carolina.....	5,522	13,399	5,427	5,225	45,337	7,597	4,950	62,193	10,893
Georgia.....	6,352	23,732	11,688	5,381	51,241	16,558	5,003	52,059	20,841
Florida.....	602	12,925	3,625	485	85,719	14,853	274	234,544	17,375
South Atlantic.....	47,327	187,408	105,450	117,531	556,480	203,066	186,875	931,772	277,720
Kentucky.....	(4)	25,506	15,890	2,477	35,703	16,874	(24)	46,086	19,804
Tennessee.....	11,794	43,859	22,257	17,554	102,326	43,114	14,550	131,073	57,463
Alabama.....	9,057	27,475	11,317	14,494	42,820	16,267	23,670	70,592	20,485
Mississippi.....	1,507	24,555	..	12,343	79,416	..	14,406	102,194	..
East South Central.....	22,354	121,395	49,464	46,868	260,265	76,255	52,602	349,945	97,752
Arkansas.....	1,236	6,894	295	2,530	7,370	1,214	2,443	16,953	2,512
Louisiana.....	12,019	56,047	38,792	13,679	105,748	43,904	12,327	142,393	49,847
Oklahoma.....	3,055	34,252	7,578	3,526	105,748	11,966	3,396	121,398	28,188
Texas.....	3,978	73,045	29,665	4,102	335,606	63,418	4,413	465,822	97,557
West South Central.....	20,238	170,238	76,330	23,837	548,502	120,502	22,579	746,512	178,104
Montana.....	965	10,354	275	4,313	45,971	1,579	4,319	52,200	1,704
Idaho.....	2,057	6,546	..	5,166	36,704	..	5,052	42,978	..
Wyoming.....	117	3,396	..	2,776	13,640	..	2,403	22,345	..
Colorado.....	1,144	19,776	5,413	9,509	68,269	18,244	11,335	118,870	38,874
New Mexico.....	1,129	5,211	..	4,560	10,573	..	3,915	15,971	..
Arizona.....	2,999	6,255	..	..	39,329	3,513	71	51,256	..
Utah.....	1,210	9,561	5,825	9,020	33,179	8,209	7,843	34,785	12,972
Nevada.....	171	2,219	..	1,602	5,158	..	1,358	5,451	..
Mountain.....	9,792	63,318	11,513	38,296	252,223	31,545	36,296	344,356	53,550
Washington.....	331	54,469	40,675	12,260	109,213	47,499	10,986	146,115	87,012
Oregon.....	1	19,397	11,417	38,927	67,680	23,723	39,704	88,941	35,214
California.....	9,230	126,036	87,695	76,244	391,573	152,471	99,417	634,170	311,629
Pacific.....	9,562	199,902	139,787	127,431	568,460	223,693	150,107	869,226	433,855
United States.....	\$287,856	\$2,908,302	\$1,948,852	\$879,075	\$6,385,123	\$3,146,280	\$1,202,072	\$8,661,424	\$4,486,057

¹ Sinking fund assets in excess of bonded debt.

LOCAL GOVERNMENTS, BY STATES AND GEOGRAPHIC DIVISIONS, 1913, 1926 AND 1927

and Cities" series. Computed by National Industrial Conference Board)

1926			1927			Per Cent State Debt is to Combined State and Local					Per Cent Debt of Cities 30,000 and over is to Total Local Debt				
State Debt (in thousands)	Local Debt (in thousands)	Cities 30,000 and over (in thousands)	State Debt (in thousands)	Total Local Debt (in thousands)	Cities 30,000 and over (in thousands)	1913	1922	1925	1926	1927	1913	1922	1925	1926	1927
\$16,052	\$27,925	\$10,096	\$20,104	\$26,824	\$10,169	..	32.60	35.24	36.50	42.84	35.5	20.9	39.2	36.2	37.9
735	14,324	5,264	722	14,464	5,229	13.02	23.48	4.88	4.88	4.75	13.5	46.8	39.6	36.7	36.2
1,754	7,115	1,694	7092	7,092	7,092	..	29.81	20.75	19.78	19.28	..	..	..	..	..
23,868	337,765	212,579	22,103	352,713	217,322	30.74	25.61	7.15	6.60	5.90	78.8	80.1	62.6	62.9	61.6
11,060	45,079	38,565	18,385	47,745	42,328	18.39	6.69	19.98	19.70	27.80	81.5	82.4	88.5	88.7	88.7
3,604	102,975	63,913	3,078	108,079	65,374	16.51	7.05	3.99	3.38	2.77	47.3	57.6	60.4	62.1	60.5
57,073	535,183	330,417	66,086	556,917	340,422	25.46	22.63	9.86	9.64	10.61	68.0	69.4	61.2	61.7	61.1
220,561	1,634,995	1,422,998	243,534	1,769,143	1,564,723	8.56	12.14	13.12	11.89	12.09	91.9	89.9	89.1	87.0	88.4
57,235	162,329	213,398	63,158	508,967	221,523	..	5.47	11.19	11.02	10.04	54.4	48.5	47.1	46.2	43.5
83,672	764,976	535,557	92,361	838,435	583,733	..	9.64	8.87	9.86	9.92	67.4	54.2	68.3	70.0	69.6
361,468	2,862,300	2,171,953	398,873	3,116,545	2,369,979	6.24	10.75	11.75	11.21	11.35	83.6	76.5	77.1	75.9	76.0
15,325	654,316	374,849	13,643	691,138	375,349	..	5.42	2.84	2.29	1.94	61.4	45.6	57.5	57.3	54.3
1,689	189,686	60,404	1,649	200,723	61,461	0.12	0.31	0.72	0.88	0.81	16.0	12.9	31.9	31.8	30.6
136,819	290,211	224,194	138,344	344,067	261,987	1.02	5.85	30.90	32.04	28.68	69.8	38.1	69.1	77.3	76.1
68,717	449,799	277,067	67,781	531,006	287,995	..	16.31	15.76	13.25	11.32	33.9	58.3	60.5	61.6	54.2
1,764	129,811	60,157	1,664	146,357	72,157	..	2.25	1.48	1.34	1.12	40.6	43.7	46.7	46.3	49.3
224,314	1,713,803	996,671	223,081	1,913,311	1,058,949	0.12	7.24	12.00	11.57	10.44	52.7	43.1	56.5	58.2	55.3
12,228	186,582	78,804	11,715	188,107	82,525	1.95	11.75	7.32	6.15	5.86	68.1	36.6	40.2	42.2	43.9
18,214	144,244	34,850	16,701	156,831	53,429	..	0.16	12.04	11.21	9.62	41.0	14.6	24.1	24.2	22.6
63,607	133,387	65,456	65,559	150,738	82,989	0.34	31.69	30.11	32.29	30.31	63.4	30.6	45.8	49.1	55.1
3,857	10,604	..	4,519	7,011	..	..	17.02	27.14	28.71	26.65	39.9	..	..	..	..
27,119	105,588	37,407	14,401	28,450	38,470	..	57.13	38.18	37.79	33.61	..	..	..	..	..
25,789	120,070	21,448	24,837	126,817	21,451	0.63	..	18.90	17.68	16.38	24.1	11.9	18.5	17.9	16.9
140,168	727,594	237,965	137,732	770,104	260,864	1.07	11.70	15.91	16.15	15.17	49.9	21.5	31.6	32.7	33.9
8,206	23,450	10,489	8,879	22,990	10,555	7.58	26.18	24.64	25.92	27.86	65.3	56.7	45.0	44.7	45.9
22,491	147,428	117,042	23,873	166,764	125,341	12.55	18.73	14.58	13.24	12.52	90.7	86.5	79.3	79.4	75.2
16,800	138,201	85,599	23,334	134,859	87,476	32.58	18.67	12.23	10.84	14.78	57.0	63.0	65.5	61.9	62.9
47,724	68,793	10,311	51,536	76,094	10,409	..	35.70	35.14	40.96	40.35	18.7	7.6	12.6	15.0	13.7
119,038	245,783	33,034	147,856	268,087	36,023	24.24	20.84	27.98	32.81	35.55	9.2	8.6	10.8	13.6	13.4
5,253	65,166	10,872	5,004	82,862	12,459	29.18	10.33	7.37	7.46	5.70	40.5	16.8	17.5	16.7	15.0
4,960	59,646	21,718	4,839	64,566	25,197	21.11	9.50	8.77	7.68	6.97	49.2	32.3	40.0	36.4	39.0
91	364,884	48,566	..	465,138	71,036	4.45	0.56	0.12	0.02	..	28.0	17.3	7.4	13.3	15.3
224,563	1,111,351	337,631	265,321	1,281,360	378,496	20.16	17.44	16.71	16.81	17.15	56.3	36.5	29.8	30.4	29.5
(175)1	53,199	24,333	23	58,918	26,319	..	6.49	..	..	0.14	62.3	47.3	43.0	45.7	44.7
14,890	139,723	61,096	14,695	164,877	65,851	21.19	14.64	9.99	9.63	8.18	50.7	42.1	43.8	43.7	39.9
29,825	77,279	22,574	36,871	89,000	24,237	24.79	25.29	25.11	27.85	29.29	41.2	38.0	29.0	29.2	27.2
14,187	111,755	..	14,763	119,109	..	5.78	13.45	12.36	11.26	11.03	..	..	..	..	..
58,727	381,956	108,003	66,352	431,904	116,407	15.55	15.26	13.07	13.33	13.32	40.7	29.3	27.9	28.3	27.0
3,116	19,838	2,704	3,018	36,594	3,902	15.21	25.56	12.60	13.57	7.62	4.3	16.5	14.8	13.6	10.7
12,638	152,790	50,624	14,462	165,006	57,214	17.66	12.01	7.97	7.60	8.66	69.2	43.8	35.0	33.1	34.7
3,337	125,925	28,177	3,075	140,749	28,423	8.19	3.23	2.72	2.58	2.14	22.1	11.3	23.2	22.4	20.2
4,413	496,834	120,330	4,364	567,136	136,271	5.16	1.21	0.94	0.88	0.76	40.6	18.9	20.9	24.2	24.0
23,504	795,387	201,855	24,919	909,485	225,810	10.65	4.16	2.94	2.87	2.67	44.8	22.0	23.9	25.4	24.8
4,785	51,790	1,647	4,751	52,370	1,583	8.53	8.58	7.64	8.66	8.32	2.7	3.4	3.3	3.2	3.0
4,705	43,045	..	4,783	42,422	..	23.91	13.06	10.52	9.85	10.13	..	..	..	..	..
1,907	21,967	..	1,613	25,501	..	3.33	22.45	9.52	7.37	5.95	..	..	..	..	..
12,325	126,399	40,369	11,414	129,466	40,045	5.47	12.23	8.71	8.88	8.10	27.4	26.7	32.7	31.9	30.9
3,828	18,753	..	3,321	22,380	..	17.81	30.13	19.69	16.95	12.92	..	..	..	..	..
7,184	34,506	12,642	6,595	34,990	12,537	32.41	..	0.14	0.66	..	..	8.9	..	..	..
912	5,164	..	1,271	6,291	..	11.23	21.37	18.40	17.23	15.86	60.9	24.7	37.3	36.6	35.8
35,646	361,546	54,658	34,181	378,578	54,165	7.15	23.70	19.94	15.01	16.81	..	..	..	..	..
11,277	158,458	88,461	12,871	161,424	90,875	0.60	10.09	6.99	6.64	7.38	74.7	43.5	39.6	55.8	56.3
38,111	101,170	40,759	36,155	111,045	43,967	0.01	36.51	30.86	27.36	24.56	58.9	35.1	39.6	40.3	39.6
99,886	706,311	354,747	105,075	738,072	385,621	6.82	16.30	13.55	12.39	12.46	69.6	38.9	49.1	50.2	52.2
149,274	965,939	483,967	154,101	1,010,541	520,463	4.56	18.31	14.73	13.39	13.23	69.9	39.4	49.9	50.1	51.5
\$1,274,737	\$9,455,059	\$4,923,120	\$1,370,646	\$10,368,745	\$5,325,555	9.01	12.10	12.19	11.88	11.68	67.0	49.3	51.8	52.1	51.4

* Less than 0.005%.

CHART 8: PER CAPITA STATE AND LOCAL NET BONDED DEBT, BY STATES, 1913, 1922 AND 1927

(National Industrial Conference Board)

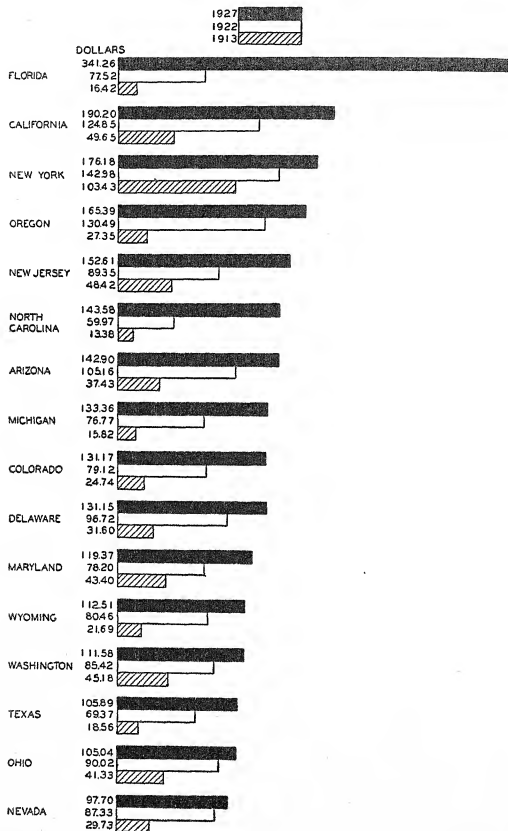
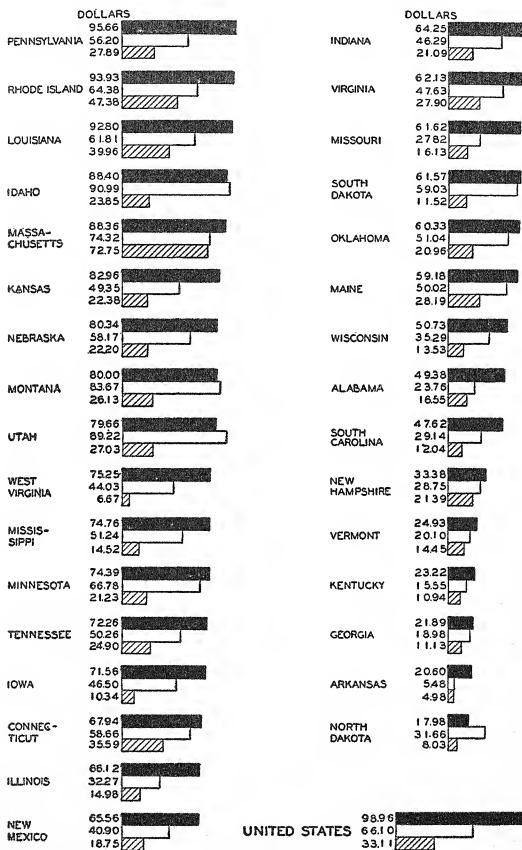


CHART 8: PER CAPITA STATE AND LOCAL NET BONDED DEBT, BY STATES, 1913, 1922 AND 1927—(Continued)



South Atlantic division, this group in 1927 ranked fourth in amount of per capita net bonded debt as compared with eighth in 1922. An idea of the rate of increase in all sections of the United States is obtained from the fact that the New England states as a group dropped from fourth to seventh place during the five-year period, although their actual state and local net bonded debt increased more than 29% and their per capita state and local net bonded debt more than 21%.

When wealth is used as a measure of the burden of state and local net bonded debt, the ranking of individual states differs very greatly from the per capita ranking, although Florida continues to head the list. North Carolina, which was sixth on a per capita basis, ranks second on the basis of net bonded debt to wealth. Mississippi, which ranked twenty-seventh on a per capita basis, had the third highest ratio of net bonded debt to wealth in 1927. This state is excellent proof of the fact that population alone is not a wholly satisfactory measure of the burden incident to a given amount of indebtedness.

Proportion of State Debt to Combined State and Local Debt

In Table 22 are presented the ratios of state net bonded debt to combined state and local net bonded debt for selected years. Maine in 1927 had the highest ratio of state debt to combined state and local net bonded debt. West Virginia ranked second and North Dakota third in this respect. Of the regional groups, the South Atlantic had the highest and the West South Central the lowest ratio of state debt to total state and local debt. Neither Florida nor Nebraska had any state net bonded debt in 1927. This was true of three states in 1922, and of eleven in 1913. The state net bonded indebtedness of three other states was negligible in 1913.

Interest Rates on State and Local Indebtedness

New bonds issued by state and local governments during 1928, as indicated by the data presented in Table 23, bore interest at an average rate of 4.44%. This was lower than the average rates of 4.66% for 1926 and 4.52% for 1927.

While the average rate of interest on new bonds issued in

1928 was 4.44%, the modal or most typical rate was $4\frac{1}{4}\%$, which rate accounted for 27% of new issues of that year. The modal rate for 1928 was perhaps even more significant than the average rate, since almost three-fourths of the total issues bore either the modal rate or those immediately above or below it.

The average rate of interest on state and local bonds issued in a given year is influenced by the geographic distribution of the new issues and their distribution according to issuing authority,¹ as well as by conditions in the money market. Higher rates of interest prevail in the southern and western states than in other sections of the United States. However, since there is a highly developed market for state and municipal obligations, one might expect that geographic differences in the rates of interest on governmental obligations would not be particularly marked. Such is not the case. Table 23 shows that in 1928 the state and local obligations issued by the southern and western geographic divisions had average rates higher than the average for the United States. On the other hand, the average rates of the eastern and north central geographic divisions were lower than the average for the United States.

State and local bonds issued in Vermont in 1928 bore interest at an average rate of 3.85%, the lowest of any state. Massachusetts' average rate of 3.97% was second. These two were the only states having an average rate of less than 4% on state and local bonds issued in that year. Florida had the highest average rate, 5.50%, but was closely followed by New Mexico with a rate of 5.45%. Of the geographic divisions, New England had the lowest average rate on new issues, 4.01%, and the Mountain division the highest, 4.94%.

Table 24 shows, for 1926, the distribution by rate of interest of the outstanding indebtedness of cities over 30,000, classified by geographic divisions. The same geographic differences are in evidence as in the case of total state and local bond issues. The modal or most typical rate is found to be lowest for the cities in the New England states. The highest modal rate, 5%, is shared by five regional groups, all of

¹ For distribution of new issues in recent years according to issuing authority, see Table 13.

TABLE 23: PERCENTAGE DISTRIBUTION, BY STATES AND GEOGRAPHIC DIVISIONS, OF STATE AND LOCAL BONDS ISSUED DURING THE CALENDAR YEAR 1928, ACCORDING TO RATE OF INTEREST

(Source: Commercial and Financial Chronicle. Computed by National Industrial Conference Board)

States and Geographic Divisions	3½%	3¾%	4%	4¼%	4½%	4¾%	5%	5¼%	5½%	5¾%	6%	Higher than 6%	Unknown	Average Rate¹
Maine.....	..	..	93.43	2.28	4.29	2.79	..	..	..	..	..	..	..	4.03
New Hampshire.....	..	..	76.00	12.54	1.67	..	..	..	..	..	..	..	..	4.08
Massachusetts.....	2.53	73.86	61.90	12.54	1.67	..	..	..	..	..	..	..	..	3.85
Rhode Island.....	..	23.43	61.60	9.65	2.79	..	..	..	..	..	..	..	..	3.97
Connecticut.....	..	..	39.69	28.97	31.34	..	..	..	..	..	..	..	..	4.23
New York.....	1.33	20.81	54.55	34.86	10.59	0.08	..	..	..	..	..	..	..	4.14
New England.....	..	..	57.13	14.71	5.94	..	..	..	..	..	..	..	..	4.01
New York.....	4.38	1.19	38.50	45.55	7.22	0.34	2.55	..	0.01	0.02	0.24	..	0.24	4.15
New Jersey.....	..	..	14.99	26.70	38.78	3.57	6.31	0.21	4.62	1.59	1.81	1.42	1.42	4.49
Pennsylvania.....	1.78	..	18.40	34.50	6.78	0.60	0.83	0.33	0.53	0.04	0.42	0.42	0.42	4.13
Middle Atlantic.....	3.16	0.75	38.32	40.53	11.78	0.89	2.76	0.03	0.78	0.24	0.30	0.46	0.46	4.20
Ohio.....	..	..	2.57	17.22	43.31	12.63	15.59	2.05	4.16	0.62	0.88	0.97	0.97	4.63
Indiana.....	3.85	..	14.10	12.73	50.81	0.77	14.73	..	0.10	1.51	1.51	1.40	1.40	4.46
Illinois.....	..	..	53.14	31.94	8.90	2.49	1.42	..	0.03	..	0.50	1.58	1.58	4.17
Michigan.....	..	4.45	7.01	38.72	16.12	5.14	16.33	1.41	4.62	0.20	4.74	1.26	1.26	4.56
Wisconsin.....	..	..	22.59	71.56	0.18	2.94	..	..	..	0.20	0.20	2.53	2.53	4.46
East North Central.....	0.24	1.23	24.21	28.94	24.24	5.20	9.52	0.83	2.20	0.19	1.80	1.40	1.40	4.41
Minnesota.....	..	..	19.64	41.01	9.34	..	4.31	2.36	6.75	..	0.19	16.40	16.40	4.39
Iowa.....	..	..	6.71	43.80	31.03	16.54	1.09	..	..	..	0.05	4.40	4.40	4.40
Missouri.....	..	..	7.84	70.05	17.48	1.34	3.15	0.08	..	..	..	0.06	0.06	4.11
North Dakota.....	..	..	..	40.59	8.57	23.91	6.31	5.19	..	..	1.89	10.93	10.93	4.86
South Dakota.....	..	..	38.94	11.49	15.34	5.77	10.02	0.63	0.13	0.22	2.71	16.15	16.15	4.56
Nebraska.....	..	..	25.22	19.68	27.48	12.75	5.48	0.46	1.33	..	0.59	5.01	5.01	4.44
Kansas.....	..	1.68	28.45	23.03	40.83	1.15	0.27	..	..	..	0.38	4.23	4.23	4.29
West North Central.....	..	0.13	11.12	45.33	24.01	9.05	3.02	1.28	1.09	..	0.31	4.60	4.60	4.39
Delaware.....	..	..	44.72	44.72	44.72	..	7.39	..	..	..	..	..	..	4.31
Maryland.....	..	..	10.22	13.35	0.32	0.32	8.08	..	..	..	..	..	..	4.31
Virginia.....	..	..	11.58	17.38	3.71	3.71	14.93	..	..	..	0.63	0.79	0.79	4.50
West Virginia.....	..	..	15.31	..	17.88	3.21	47.17	3.36	8.86	..	..	4.21	4.21	4.79
North Carolina.....	..	..	25.35	4.93	19.79	18.62	25.81	0.55	2.08	0.14	1.74	0.99	0.99	4.59
South Carolina.....	..	..	0.11	48.42	26.48	20.06	..	..	1.26	0.13	1.98	1.56	1.56	4.73
Georgia.....	..	..	32.37	24.10	26.48	2.85	29.17	4.09	2.85	6.82	4.14	5.11	5.11	4.65
Florida.....	..	..	2.26	3.16	8.37	8.37	20.30	15.37	15.37	39.95	..	1.70	1.70	5.50
South Atlantic.....	..	..	21.26	6.54	19.78	9.73	21.58	1.36	5.27	1.80	11.19	1.49	1.49	4.77

Kentucky.....	17.53	22.55	46.85	1.59	6.27	0.11	0.72	1.03	..	3.46	4.41
Tennessee.....	17.94	5.65	34.21	14.91	19.00	2.36	2.05	1.17	..	0.87	4.58
Alabama.....	15.84	15.84	39.51	2.05	3.08	1.19	0.90	26.19	..	0.40	4.85
Mississippi.....	..	..	46.50	10.92	17.05	8.22	0.16	4.82	..	4.72	4.84
East South Central.....	11.40	10.93	41.00	7.30	10.93	2.22	2.72	10.24	..	2.04	4.70
Arkansas.....	..	64.01	12.54	2.27	10.91	2.54	2.61	3.50	..	1.62	4.50
Louisiana.....	..	0.68	57.04	21.32	10.51	1.96	1.27	4.59	..	1.15	4.69
Oklahoma.....	0.34	23.03	36.79	8.24	11.89	0.01	1.38	2.59	..	1.35	4.68
Texas.....	..	1.30	17.22	12.93	20.18	0.56	20.74	8.14	..	2.22	4.92
West South Central.....	4.68	20.21	25.64	11.86	15.96	0.99	11.85	6.00	..	2.60	4.76
Montana.....	12.72	18.32	33.84	..	13.70	4.12	4.96	0.41	..	7.07	4.63
Idaho.....	..	..	32.48	8.14	20.73	..	1.83	3.73	4.53	21.70	4.98
Wyoming.....	..	44.64	29.89	5.62	5.89	..	1.98	5.03	..	6.95	4.53
Colorado.....	15.30	9.15	18.16	2.39	12.69	0.60	40.64	4.07	..	7.00	4.98
New Mexico.....	..	..	11.64	2.63	15.58	18.06	7.71	39.43	..	3.44	5.45
Arizona.....	..	6.42	11.66	2.68	66.39	0.17	0.10	7.28	..	1.43	4.94
Utah.....	47.72	1.88	40.64	2.68	31.25	..	..	2.25	..	3.49	5.30
Nevada.....	..	..	..	37.50	31.25	..	31.25	1.05	..	5.26	4.94
Mountain.....	7.00	7.95	18.31	4.48	33.17	3.84	6.73	11.79	0.42	..	..
Washington.....	23.31	20.09	20.05	10.91	1.62	..	14.79	7.57	0.72	0.94	4.65
Oregon.....	20.78	4.75	24.90	12.88	6.51	0.95	8.11	19.89	..	1.16	4.84
California.....	15.22	7.85	23.95	1.64	40.28	0.83	0.63	4.58	..	0.48	4.78
Pacific.....	16.79	9.37	23.47	3.82	52.19	0.72	3.22	6.17	3.47	0.60	4.77
United States.....	1.43	25.77	19.87	4.80	10.60	0.74	3.03	3.41	0.29	1.35	4.44

¹ In computing the average rate, bonds bearing interest at rates higher than 6% were treated as bearing interest at 6%.

² Those bearing interest at unknown rates were excluded in computing the average rate.

³ Less than 0.005%.

TABLE 24: PERCENTAGE DISTRIBUTION OF INDEBTEDNESS OF CITIES OVER 30,000, BY RATE OF INTEREST, 1926; CITIES GROUPED BY GEOGRAPHIC DIVISIONS¹

(Source: U. S. Bureau of the Census, "Financial Statistics of Cities, 1926." Computed by National Industrial Conference Board)

Geographic Division	3%	3½%	3¾%	3.65%	3¾%	4%	4½%	4¾%	5%	5½%	5¾%	6%	7%	8%	Other Reported Rates	Rates Not Reported	Non-Interest-bearing
New England.....	1.06	0.06	15.96	0.01	0.28	47.50	13.36	9.18	0.84	5.10	0.30	0.77	0.01	0.41	5.05	0.10	0.01
Middle Atlantic.....	19.25	0.07	9.28	0.01	0.19	17.53	26.36	17.19	0.74	3.01	0.58	0.93	0.40	0.01	4.44	0.01	0.00
East North Central.....	0.16	..	2.22	0.49	0.01	19.78	6.98	22.59	5.14	23.67	0.95	5.58	0.47	9.38	1.95	0.59	0.04
West North Central.....	..	..	0.33	0.14	..	19.57	9.46	40.95	5.75	18.66	0.08	2.28	..	2.06	0.37	0.13	0.05
South Atlantic.....	0.03	0.38	9.77	0.02	..	21.34	1.02	22.82	3.45	31.14	1.15	2.28	0.04	5.74	0.12	0.09	0.04
East South Central.....	0.24	..	1.84	..	..	11.91	4.53	27.82	8.80	30.78	0.16	3.09	0.75	8.26	0.11	0.24	0.31
West South Central.....	..	..	..	..	..	13.64	0.88	18.97	4.08	49.30	0.15	7.77	..	4.65	0.13	..	0.07
Mountain.....	..	..	..	..	..	4.13	1.23	53.16	0.70	16.97	..	13.15	..	9.92	0.31	..	0.74
Pacific.....	..	..	0.28	..	0.41	5.18	1.13	34.36	10.40	35.72	0.35	5.20	0.31	6.20	0.34	..	0.01
United States.....	9.77	0.06	6.75	0.11	0.14	18.88	16.11	21.03	2.96	14.21	0.60	2.67	0.13	3.35	3.03	0.13	0.03

¹ Includes funded, floating and special assessment debt and revenue loans.

² Less than 0.005%.

TABLE 25: PERCENTAGE DISTRIBUTION OF INDEBTEDNESS OF CITIES OVER 30,000, BY RATE OF INTEREST, 1927; CITIES GROUPED ACCORDING TO SIZE¹

(Source: U. S. Bureau of the Census, "Financial Statistics of Cities, 1927." Computed by National Industrial Conference Board.)

Size of City	3%	3½%	3¾%	3.65%	3¾%	4%	4½%	4¾%	5%	5½%	5¾%	6%	7%	8%	Other Reported Rates	Rates Not Reported	Non-Interest-bearing
Cities of 500,000 and over	15.78	0.11	9.03	0.12	0.11	22.32	22.09	15.71	1.53	7.33	0.49	1.23	0.02	1.37	2.73	..	0.01
Cities of 300,000 to 500,000	0.85	..	5.37	0.87	0.01	23.24	10.65	31.51	4.41	13.62	0.42	4.08	0.60	2.91	1.44	..	0.02
Cities of 100,000 to 300,000	0.17	0.02	1.93	..	0.26	16.05	9.75	28.45	3.41	26.37	0.61	4.94	0.06	5.40	2.32	0.09	0.09
Cities of 50,000 to 100,000	0.13	..	0.87	0.17	0.55	13.48	11.35	29.70	7.27	21.84	0.87	3.42	0.07	6.16	3.92	0.01	0.04
Cities of 30,000 to 50,000	0.07	0.05	1.04	0.03	0.54	11.55	9.15	21.34	4.96	26.82	1.29	5.63	0.11	14.84	2.43	0.01	0.03
All cities of 30,000 and over	9.67	0.07	6.44	0.18	0.18	20.16	17.40	20.87	2.75	13.25	0.56	2.52	0.11	3.16	2.61	0.02	0.02

¹ Includes funded, floating and special assessment debt and revenue loans.

² Less than 0.005%.

which, with the exception of the East North Central, are comprised of southern and western states.

The distribution of municipal indebtedness in 1927, by rate of interest, with the cities classified according to size, is shown in Table 25. As one might expect, the larger municipalities borrow at lower rates than the smaller ones. The proportion of total loans at the rates of $3\frac{1}{2}\%$ and 4% decreases as cities decrease in size, while the proportion borrowed at rates higher than 5% increases. The larger cities borrow very little at rates of $5\frac{1}{2}\%$ and 6% , while cities having a population between 30,000 and 50,000 borrow considerable amounts at these relatively high rates.

The effects of the geographic location and the size of the city are, of course, intertwined in such a way that the effects of each factor can not be definitely isolated. Both factors are influential and perhaps one is as significant as the other. The larger cities are on the average better administered from a financial standpoint than the smaller cities, and as a consequence they are able to make use of their credit at more favorable rates than the smaller cities in the same geographic division.

Interest rates on public obligations are unquestionably an important factor in determining the extent to which public credit is and shall be used, but the cost of money is more significant. Determination of the cost of money to state and local governments would involve collection of data showing the selling prices of public securities, consideration of the selling prices in relation to the face amount and maturity dates of the issues, special commissions and other factors.

Data on costs have not been compiled, but certain comparative yield figures are available that may be used to indicate the relative market position of municipal obligations as compared with that of other bonds. Not only is the investor interested in the yield of bonds of a given type but the present and prospective issuers of bonds are likewise vitally interested, for yield is the best indicator as to the rate of interest future bond issues will have to bear in order that they may be marketed at or near par. That Federal Government bonds sell on a low-yield basis is well known. However, the status of high-grade municipals as compared with high-

grade railroads, industrials and utilities is perhaps not fully appreciated. In Table 26 the yield of municipal bonds is compared with that of other bonds. One conclusion is immediately evident; municipal bonds in recent years have not been maintaining their former margin of difference in yield except in comparison with industrials. While still selling at a considerably lower yield than railroad and public utility bonds, there has been a tendency for municipals to sell at a yield gradually approaching that of other bonds, particularly railroad bonds. This tendency is partly a result of changes in federal income tax rates. As the rates, particularly the surtax rates, are adjusted downwards, municipal bonds naturally lose to some degree their relative advantages as to yield. Tax-exempt securities yielding low rates of return must necessarily lose a part of their desirability to the large investor as the income tax burden becomes less onerous.

TABLE 26: YIELDS OF MUNICIPAL AND OTHER BONDS,
1921 TO 1928

(Source: *Survey of Current Business*, August, 1929. Compiled by Standard Statistics Company. Computed by National Industrial Conference Board)

Year (Monthly Average)	Fifteen Rail- roads	Fifteen Indus- trials	Fifteen Utilities	Fifteen Municip- als	Total, Sixty High Grade Bonds	Per Cent by Which Yield of Municip- als is Lower than			
						Rail- roads	Indus- trials	Utilities	Sixty High Grade Bonds
1921	5.57	5.96	6.56	5.09	5.79	8.62	14.60	22.41	12.09
1922	4.85	5.21	5.46	4.23	4.94	12.78	18.81	22.53	14.37
1923	4.98	5.26	5.41	4.25	4.98	14.66	19.20	21.44	14.66
1924	4.78	5.21	5.22	4.20	4.85	12.13	19.39	19.54	13.40
1925	4.67	5.06	5.06	4.09	4.72	12.42	19.17	19.17	13.35
1926	4.51	4.91	4.90	4.08	4.60	9.53	16.90	16.73	11.30
1927	4.31	4.83	4.78	3.98	4.47	7.66	17.60	16.74	10.96
1928	4.34	4.88	4.68	4.05	4.49	6.68	17.01	13.46	9.80

The Future of State and Local Indebtedness

The immediate future of state and local debt is indeed difficult to forecast. However, the ratio of retirements to new issues may give some indication. Table 27 shows the ratio of retirements to new issues for individual states and regional groups for the years 1923 to 1928. In each of the years 1926, 1927, and 1928, the ratio for the United States showed a tendency to increase and was larger than the average of 24.52% for the six-year period.

TABLE 27: RATIO OF RETIREMENTS TO NEW BOND ISSUES,
CALENDAR YEARS 1923 TO 1928(Source: *Commercial and Financial Chronicle*. Computed by National Industrial Conference Board)

States and Geographic Divisions	1923	1924	1925	1926	1927	1928	Total
<i>Per Cent</i>							
Maine.....	28.35	56.12	114.72	22.86	57.95	111.61	60.77
New Hampshire.....	61.70	104.50	79.64	84.74	93.46	80.44	80.35
Vermont.....	95.64	66.88	31.53	102.38	123.00	6.86	26.57
Massachusetts.....	96.08	78.82	79.70	72.66	72.55	111.90	84.81
Rhode Island.....	83.05	35.22	27.48	19.03	17.90	84.50	33.04
Connecticut.....	65.47	35.75	26.39	52.20	45.16	35.74	39.58
New England.....	84.53	64.79	57.32	58.17	56.95	82.47	66.62
New York.....	71.04	12.90	27.17	23.32	19.52	30.41	24.30
New Jersey.....	21.88	15.47	23.36	30.43	33.82	45.17	28.42
Pennsylvania.....	15.90	20.37	5.41	7.62	14.17	14.69	10.95
Middle Atlantic.....	36.54	14.51	17.05	20.10	21.30	29.51	21.64
Ohio.....	30.97	38.61	47.34	72.44	61.40	71.78	52.64
Indiana.....	10.67	32.17	28.39	50.00	38.52	22.37	27.87
Illinois.....	13.45	19.95	16.80	49.45	33.04	25.53	23.20
Michigan.....	11.95	12.66	15.87	16.29	12.48	20.28	15.09
Wisconsin.....	15.87	42.15	39.80	46.02	23.11	29.92	30.29
East North Central.....	18.18	25.90	27.04	45.32	33.60	32.23	29.84
Minnesota.....	17.23	15.55	64.06	71.77	69.36	214.54	44.67
Iowa.....	9.01	30.98	38.82	61.24	35.01	23.91	26.93
Missouri.....	24.41	14.41	12.13	14.74	29.52	63.69	21.81
North Dakota.....	10.28	13.81	41.98	15.39	104.81	148.49	25.17
South Dakota.....	9.28	15.58	229.87	53.65	76.45	66.35	41.44
Nebraska.....	23.94	29.92	15.01	16.88	18.90	52.72	23.02
Kansas.....	4.83	25.36	33.40	45.26	42.43	90.30	25.01
West North Central.....	12.82	18.85	29.32	36.36	40.71	70.63	29.33
Delaware.....	8.59	12.43	15.50	22.54	60.33	25.76	21.05
Maryland.....	55.69	21.32	45.42	26.17	30.39	55.60	38.00
Virginia.....	20.12	15.93	8.99	9.85	30.24	93.50	22.73
West Virginia.....	8.64	5.32	9.10	14.44	32.40	27.66	14.40
North Carolina.....	3.83	4.92	8.55	14.09	13.13	35.08	10.96
South Carolina.....	39.35	32.27	48.37	65.63	5.51	13.93	28.22
Georgia.....	80.89	101.01	110.19	41.11	27.01	38.07	59.08
Florida.....	2.91	6.62	2.49	2.37	5.54	52.13	6.24
South Atlantic.....	16.31	13.01	13.19	12.27	13.51	41.99	16.31
Kentucky.....	45.39	15.74	11.91	12.30	16.81	15.66	17.57
Tennessee.....	38.89	26.65	20.18	34.93	15.55	7.25	21.05
Alabama.....	3.39	15.43	2.44	2.22	4.59	8.74	6.52
Mississippi.....	20.35	20.01	26.65	20.24	25.67	23.76	22.73
East South Central.....	26.30	19.96	13.97	17.97	14.02	12.86	16.36
Arkansas.....	62.35	86.52	39.58	44.11	18.97	15.61	32.65
Louisiana.....	25.92	10.67	25.19	20.10	24.07	20.95	20.77
Oklahoma.....	14.38	19.43	30.42	25.69	16.40	8.30	15.60
Texas.....	9.32	7.56	9.12	10.80	11.04	11.45	10.06
West South Central.....	18.09	14.96	16.67	17.96	14.81	12.97	15.40
Montana.....	27.78	29.61	46.18	75.44	47.17	38.13	39.00
Idaho.....	96.82	9.48	46.76	99.81	176.89	26.61	55.61
Wyoming.....	4.39	4.14	5.82	32.12	17.45	20.30	10.05
Colorado.....	17.10	6.21	8.78	16.99	41.55	89.85	15.04
New Mexico.....	19.15	4.11	27.17	4.31	12.88	15.59	11.31
Arizona.....	12.98	9.87	12.88	8.01	8.53	9.49	9.70
Utah.....	16.22	171.53	54.35	170.90	55.27	114.57	76.86
Nevada.....	44.74	157.87	134.13	405.00	19.94	355.13	84.15
Mountain.....	22.37	12.44	21.70	25.16	28.38	33.49	22.31
Washington.....	21.74	21.16	21.24	21.62	76.84	43.31	35.37
Oregon.....	16.58	22.04	34.09	25.74	28.28	74.84	29.99
California.....	11.06	9.50	14.00	24.30	46.06	29.03	20.41
Pacific.....	12.99	12.08	17.35	24.10	48.71	34.51	23.60
United States.....	22.44	18.90	20.99	25.07	26.07	32.99	24.52

In 1928 six states had a ratio of retirements to new bond issues in excess of 100 per cent—that is, retirements exceeded new issues. Vermont had the lowest ratio, 6.86%, in 1928 but in the preceding year the ratio for this state was 123%, among the highest in this regard. Florida in 1928 had a ratio of 52.13% compared with a 1927 ratio of 5.54% and low ratios in the years preceding 1927. For the six-year period 1923 to 1928, Florida had the lowest ratio, 6.24%, and Massachusetts the highest, 84.81%. The New England states had the highest ratio among the regional groups, 66.62%, while the West South Central group had the lowest ratio, 15.40%.

Any forecast of the future of state and local indebtedness involves consideration of the reasons for recent increases. The functional distribution of new bond issues and of net bonded debt has been analyzed. It was found that most of the outstanding debt of states and localities has been incurred for the purpose of making capital outlays; highways, streets and bridges, public utilities, and school buildings are the most important debt functions. The tremendous increase during the past decade in capital outlays was in part the result of the fact that outlays for these purposes during the war years were kept at a minimum. At that time the financing of the war absorbed a huge proportion of the available loan funds of the country, with the result that construction of a non-military character was practically at a standstill. After the war, construction was started on a large scale in order to make up the accumulated deficiencies. Governmental construction of all kinds increased so rapidly that it would have been a practical impossibility to finance all of it out of ordinary receipts.

Another significant reason for the increase in indebtedness lies in the fact that for a considerable period of time we have been passing through a transition period in methods of transportation. The automobile age requires roads and streets of better quality and more expensive to construct than those used by horse-drawn vehicles. Bonds for road and street construction form a considerable part of the total now outstanding. However, there are indications that a larger part of the expenditure for highway and street construction will

be financed in the future by means of gasoline taxes and other taxes rather than by the sale of bonds.

During most of the past ten years the investment credit market has been very favorable for borrowers. This condition encouraged the financing of capital additions and improvements through the flotation of securities issues. The market for securities of state and local governments has been particularly favorable, for the loan funds available were of sufficient size to meet almost any imaginable demand, and in addition the income from these securities is exempt from the federal income tax. The yield rate at which governmental securities can be sold is vitally affected by the tax-exempt privilege. The capital market of the United States during the period in question exhibited an almost unlimited ability to absorb new securities. When it is remembered that the securities of state and local governments really were sold at preferential rates in a market generally favorable for borrowers, it can easily be seen that conditions in this respect were most favorable for the use of public credit.

Another reason for increased borrowing is found in the restrictions on tax levies or tax rates. Local tax rates are frequently subject to the control of the state legislature. Presumably, the legislators intended to maintain an adequate balance between governmental receipts and the income of the communities involved, but the practical effect of such legislation has been in most cases to restrict income from taxes and not to restrict expenditures. On the other hand, bonded debt is frequently limited by laws which provide that such debt may not exceed a certain percentage of assessed valuation. When this limit is reached, floating debt is used in order to meet current obligations, or assessments are increased in order that borrowing power may be increased.

It is doubtful that state and local debt will long continue to increase at the rate which prevailed during most of the last decade. New forms of taxation are being made use of, resulting in increased tax revenues, and consequently a larger part of capital expenditures will doubtless be financed out of ordinary receipts. The extent of this possibility will be limited, of course, by the fact that as indebtedness increases, interest charges absorb a larger part of receipts. Nevertheless, the

most probable tendency in the future will be for state and local indebtedness to continue to increase, but at a gradually decreasing rate. Continued expansion in volume of indebtedness at a rate much more rapid than the rate of growth of our economic resources must be regarded as unhealthy. There are indications that a more normal balance between the increase in indebtedness and the growth of economic resources will gradually be obtained.

CHAPTER III

TAX COLLECTIONS

FUNDAMENTALLY, tax collections form the basis for any consideration of governmental costs. A study of public expenditures, while significant in itself, can not obtain its fullest significance unless the amounts of taxes raised, the sources of tax revenue, and the distribution of taxes among taxing authorities, are likewise considered. This chapter deals with the total volume of tax collections and their distribution among taxing authorities, while the following chapter contains an analysis of the distribution of tax collections as to source or kind of tax and the extent to which the various tax bases are used by the several taxing authorities.

The funds that are expended in a given fiscal year by all governmental divisions are derived almost exclusively from two sources—taxes and loans. Of the two sources, taxes are by far the more important. While it is true that governmental activities are financed in part by means of funds obtained through borrowing, tax revenues must, nevertheless, form the basis of any program involving expenditures for debt service. In fact, the use of public credit at any time rests basically upon the taxing power, and the two sources of income are interdependent to a much greater degree than is commonly supposed.

The taxpayer quite naturally regards tax collections as representative of the real cost of government, yet this is only true in so far as they measure the present cost to the individual. Funds obtained through borrowing, which are used for purchasing materials and services during the period under consideration, likewise represent an appropriation of a part of the national income by governmental authorities.

COMBINED TAX COLLECTIONS

Federal tax collections during recent fiscal years have been on a much lower level than during the war period. Taxes

collected by the Federal Government in the fiscal year ended in 1921 reached the enormous total of \$4,905 millions, while \$3,194 millions were collected in the fiscal year ended in 1928. Federal taxes since 1922 have not varied greatly in amount and disclose no definite trend upward or downward. On the other hand, state and local taxes have increased consistently, with the result that if all governmental authorities are considered together, taxes collected in each year since 1923 show an increase over the preceding year. The principal facts concerning combined tax collections are shown in Table 28 and Charts 9 and 10.

TABLE 28: COMBINED TAX COLLECTIONS, FISCAL YEARS
1890 TO 1928

(Computed by National Industrial Conference Board)

Taxing Authority	1890	1903	1913	1922	1923	1924	1925	1926	1927	1928
<i>Amount (in millions)</i>										
Federal.....	\$374	\$521	\$668	\$3,487	\$3,032	\$3,193	\$2,966	\$3,207	\$3,337	\$3,194
State.....	96	155	300	858	917	1,017	1,107	1,264	1,355	1,465
Local.....	405	706	1,219	3,157	3,285	3,602	3,811	4,134	4,367	4,630
Total.....	\$875	\$1,382	\$2,187	\$7,502	\$7,234	\$7,812	\$7,884	\$8,605	\$9,059	\$9,289
<i>Per Capita</i>										
Federal.....	\$5.93	\$6.43	\$6.92	\$31.73	\$27.15	\$28.08	\$25.71	\$27.38	\$28.13	\$26.61
State.....	1.52	1.92	3.11	7.81	8.21	8.94	9.59	10.79	11.42	12.20
Local.....	6.43	8.72	12.63	28.73	29.41	31.68	33.04	35.30	36.82	38.58
Total.....	\$13.88	\$17.07	\$22.66	\$68.27	\$64.77	\$68.70	\$68.34	\$73.47	\$76.37	\$77.39

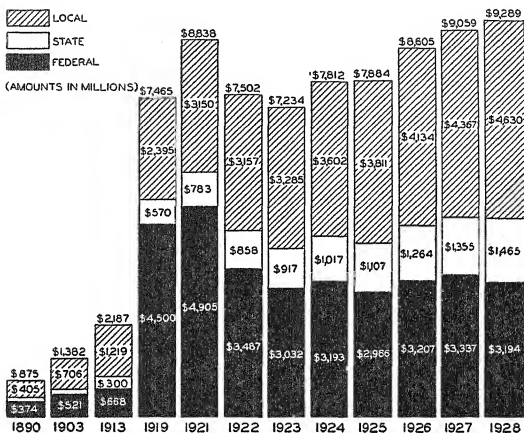
Measures of Tax Burdens

Price changes alter the purchasing power of tax receipts. As the price level declines, fewer dollars need be collected in order to accomplish a given objective; as the price level increases, the number of dollars must be augmented. The average taxpayer usually measures the volume of taxation in actual dollars, making no allowances for changes in purchasing power. In making comparisons over a period of years, differences due to changes in the price level can be eliminated by applying a series of index numbers representing changes in the general price level. In Table 29, the data presented in Table 28 are adjusted to the common basis of "1913" dollars. Expressed in "1913" dollars, combined tax collections for the fiscal year ended in 1925 were less than in the

CHART 9: COMBINED TAX COLLECTIONS, FISCAL YEARS 1890 TO 1928

(National Industrial Conference Board)

ACTUAL DOLLARS



"1913" DOLLARS

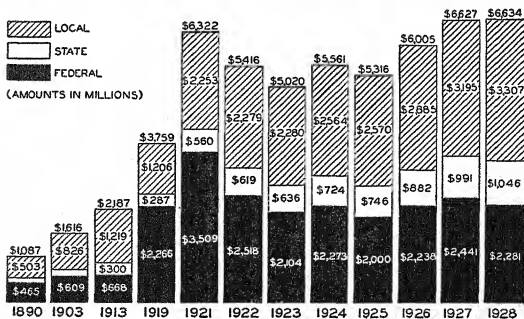
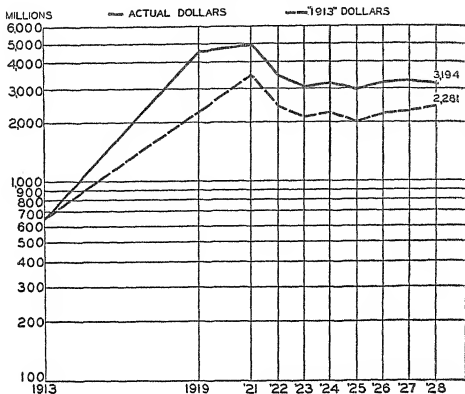


CHART 10: TREND IN TAX COLLECTIONS, FISCAL YEARS
1913 TO 1928

(National Industrial Conference Board)

FEDERAL TAXES



STATE AND LOCAL TAXES

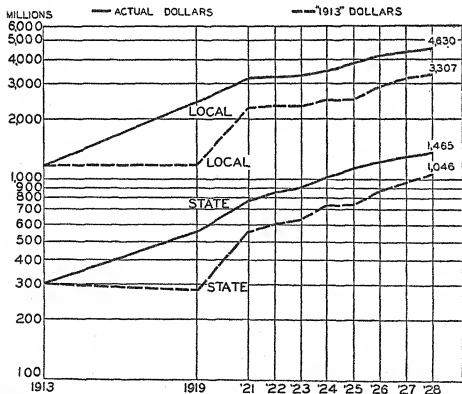


TABLE 29: COMBINED TAX COLLECTIONS, FISCAL YEARS 1890 TO 1928, EXPRESSED IN "1913" DOLLARS

(Computed by National Industrial Conference Board)

Taxing Authority	1890	1903	1913	1922	1923	1924	1925	1926	1927	1928
<i>Amount (in millions)</i>										
Federal.....	\$465	\$609	\$668	\$2,518	\$2,104	\$2,273	\$2,000	\$2,238	\$2,441	\$2,281
State.....	119	181	300	619	636	724	746	882	991	1,046
Local.....	503	826	1,219	2,279	2,280	2,564	2,570	2,885	3,195	3,307
Total.....	\$1,087	\$1,616	\$2,187	\$5,416	\$5,020	\$5,561	\$5,316	\$6,005	\$6,627	\$6,634
<i>Per Capita</i>										
Federal.....	\$7.37	\$7.52	\$6.92	\$22.91	\$18.84	\$19.99	\$17.34	\$19.11	\$20.58	\$19.01
State.....	1.90	2.23	3.11	5.64	5.70	6.36	6.47	7.53	8.35	8.71
Local.....	7.99	10.20	12.63	20.74	20.41	22.55	22.28	24.63	26.93	27.56
Total.....	\$17.26	\$19.95	\$22.66	\$49.29	\$44.95	\$48.90	\$46.09	\$51.27	\$55.86	\$55.28

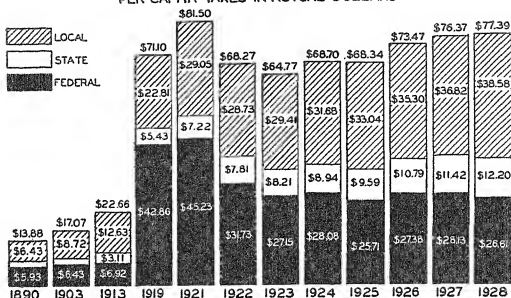
preceding year, while in actual dollars tax collections were greater for the fiscal year ended in 1925. Likewise, since the price level in 1928 was higher than in the year before, 1928 tax collections do not show so large an increase in "1913" dollars as in actual dollars over taxes collected in 1927. Per capita taxes in "1913" dollars for the fiscal year ended in 1928 were actually lower than in the preceding year. Chart 10 indicates the difference in the trend of taxes expressed in "1913" dollars from that of taxes expressed in actual dollars.

Table 30 and Chart 11 show the ratios of tax collections to national income for a number of years. Taxes, with a few exceptions such as property taxes collected through tax sales, are paid out of income. Variations in national income are important in any consideration of tax burdens. If national income shows a considerable increase, a larger volume of tax collections may actually involve a decrease in burdens. In 1925, for example, tax collections were larger in amount than in 1924, but the proportional increase in national income was greater than the proportional increase in tax collections, with the result that the ratio of tax collections to national income declined from 11.2% to 10.2%. Since 1925, the ratio of tax collections to national income has shown increases each year, which are attributable to the fact that national income has varied within narrow limits during these years, while tax collections have increased steadily. The ratio was 10.8% for 1926, 11.6% for 1927, and 11.9% for 1928.

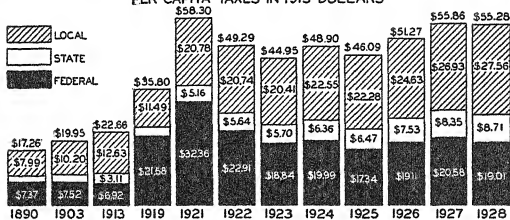
CHART 11: MEASURES OF COMBINED TAX BURDEN, FISCAL
YEARS 1890 TO 1928

(National Industrial Conference Board)

PER CAPITA TAXES IN ACTUAL DOLLARS



PER CAPITA TAXES IN "1913" DOLLARS



PER CENT THAT TAXES ARE OF NATIONAL INCOME

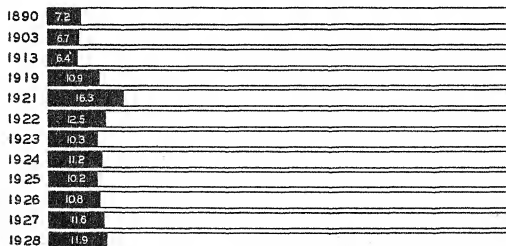


TABLE 30: TAX COLLECTIONS AND NATIONAL INCOME, 1890 TO 1928

(Source: National Industrial Conference Board Income Estimates)

Taxing Authority	1890	1903	1913	1922	1923	1924	1925	1926	1927	1928 ¹
<i>National Income (in millions)</i>										
	\$12,082	\$20,500	\$34,400	\$59,968	\$70,603	\$69,911	\$77,376	\$79,369	\$77,931	\$78,051
<i>Per Cent that Taxes are of National Income</i>										
Federal.	3.1	2.5	1.9	5.8	4.3	4.6	3.8	4.0	4.3	4.1
State...	0.8	0.8	0.9	1.4	1.3	1.5	1.4	1.6	1.7	1.9
Local...	3.3	3.4	3.6	5.3	4.7	5.1	5.0	5.2	5.6	5.9
Total.	7.2	6.7	6.4	12.5	10.3	11.2	10.2	10.8	11.6	11.9

¹Preliminary estimate.*Distribution of Tax Collections by Taxing Authority*

From 1919 to 1923 the proportion of federal taxes to all taxes declined rapidly. Since 1923 the proportion has declined steadily though more slowly. The proportion for 1923 was 41.9%, and for 1928 it was 34.4%. Since 1919 both state tax collections and local collections have increased rapidly in relation to combined tax collections, the gain being the most rapid in the case of state tax collections. For the fiscal year ended in 1928, local tax collections amounted to almost one-half of the combined collections of all taxing authorities, while state tax collections were less than one-sixth of the total. Table 31 indicates that the proportion of state tax collections to combined tax collections has been greater for recent years than for 1913 and that the proportion for local tax collections has been smaller.

TABLE 31: PERCENTAGE DISTRIBUTION OF TAX COLLECTIONS, BY TAXING AUTHORITY, FISCAL YEARS 1890 TO 1928

(Computed by National Industrial Conference Board)

Taxing Authority	1890	1903	1913	1922	1923	1924	1925	1926	1927	1928
Federal..	42.7	37.7	30.6	46.5	41.9	40.9	37.6	37.3	36.8	34.4
State....	11.0	11.2	13.7	11.4	12.7	13.0	14.1	14.7	15.0	15.8
Local....	46.3	51.1	55.7	42.1	45.4	46.1	48.3	48.0	48.2	49.8
Total..	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

FEDERAL TAX COLLECTIONS

The taxes collected by the Federal Government during the fiscal year ended in 1929 were greater in amount than in any year since 1922. The tax reduction program instituted in 1921, which is still being continued, has of course affected the amount of revenue which the various federal taxes produce, but, in spite of rate reductions, total federal tax collections have not varied very much from year to year. This would seem to indicate that thus far the reduction measures put into effect since 1922 have had the effect of preventing an expansion in collections rather than actually decreasing the aggregate amounts collected. Since 1923 the greatest change in the volume of collections from one year to the next occurred in the fiscal year ended in 1926, in which year federal tax collections amounted to 9% more than in the preceding year. In recent years, with only one exception, federal taxes collected have alternately decreased and increased in amount.

Table 32 shows federal tax collections for the fiscal years 1921 to 1929, and the percentage change from year to year. It should be noted that the figures presented in this table are for gross collections, whereas the figures for federal taxes in Table 28 are net figures, with refunds during the fiscal year deducted from the collections of that year.

TABLE 32: FEDERAL TAX COLLECTIONS, FISCAL YEARS
1921 TO 1929¹

(Source: Annual Reports of the Secretary of the Treasury. Computed by National Industrial Conference Board)

Year	Amount (in millions)	Per Cent Increase or (-) Decrease from Preceding Year
1921	\$4,903	..
1922	3,561	-27.4
1923	3,190	-10.4
1924	3,349	5.0
1925	3,139	-6.3
1926	3,423	9.0
1927	3,479	1.6
1928	3,365	-3.3
1929	3,550	5.5

¹ On basis of reports of collections.

Federal tax collections for the fiscal year ended in 1929 were 5.5% greater than in the preceding year, as a result of

larger collections from all important sources. Each of the three largest producers of federal revenue—income taxes, customs, and sumptuary excises—showed substantial increases in yield when compared with the preceding year. The increased yield of the personal income tax accounted for a large part of the total gain. Profits from successful speculative ventures in the securities markets unquestionably enlarged the amount of taxable income received in 1928, upon which personal income taxes were paid during 1929. The increase in yield from the personal income tax in the fiscal year ended in 1929 was equivalent to almost four times the decrease in the yield from the corporation income tax.

STATE AND LOCAL TAX COLLECTIONS

State and local tax collections amounted to \$5,723 millions for the fiscal year ended in 1927, an increase of 6% over the preceding year. The increase from 1922 to 1926 amounted to 34.4%. Per capita state and local tax collections amounted to \$36.54 for the fiscal year ended in 1922, \$46.09 for that ended in 1926, and \$48.24 for that ended in 1927. Per capita state and local taxes during the five-year period from 1922 to 1927 increased almost one-third, while the increase in the amount of taxes collected was 42.5%.

During the fiscal year ended in 1927, the state and local taxes collected in the state of New York amounted to \$869 millions, an amount more than twice as large as the collections in the next ranking state, Pennsylvania. The collections in the latter state amounted to \$424 millions. In California, which ranked third, state and local tax collections amounted to \$346 millions. The taxes collected in these three states amounted to 28.7% of the state and local collections in the United States. Nevada, with \$6.7 millions, had the smallest state and local tax collections for 1927.

In only three states, North Dakota, South Dakota and Montana, were state and local taxes collected during the fiscal year ended in 1927 smaller in amount than those in the preceding fiscal year; and the decreases in these states were not large. In each geographic division, taxes collected in 1927 showed an increase over the preceding year.

Per capita collections in Nevada for the fiscal year ended in

1927 were larger than in any other state, amounting to \$86.39 as compared with \$74.46 in 1922. California ranked second and New York third in per capita collections; the respective amounts for 1927 were \$78.16 and \$76.10. Table 33 shows the per capita state and local tax collections in each of the states for the fiscal years ended in 1922, 1926 and 1927. According to the data presented in this table, per capita state and local taxes in two states, Arizona and New Mexico, were lower in the fiscal year ended in 1926 than in that ended in 1922, while in seven¹ states, all located in the West except Delaware, per capita state and local taxes were lower in the fiscal year ended in 1927 than in the preceding year.

State Tax Collections

State taxes collected during the fiscal year ended in 1927 amounted to \$1,355 millions, an increase of \$91 millions or 7.2% over the preceding year. The rate of increase was only slightly more than half that of 1926 over 1925, which was 14.2%. In seven states, North Dakota, Nebraska, Florida, Mississippi, Wyoming, Arizona and California, state taxes collected were smaller in amount in 1927 than in 1926. The largest increase in state tax collections in the fiscal year ended in 1927 was shown by Washington; 1927 collections in that state exceeded those of 1926 by 23%. In two other states, Alabama and New Mexico, 1927 state tax collections exceeded 1926 collections by more than 20%.

In only three states, Ohio, New Mexico and Arizona, were 1926 state tax collections smaller than those in 1922. Aggregate state tax collections in the United States increased more than 47% from 1922 to 1926. During that period the changes in volume of state tax collections in individual states ranged from a decrease of 15.6% in the case of Ohio to an increase of 183.6% for Oklahoma. For the same period, state tax collections in Florida increased almost 180%. In both Florida and Oklahoma there occurred far-reaching changes of an economic nature, and their rate of development during the period in question can not be regarded as typical of the United States as a whole.

¹ Delaware, Nebraska, North Dakota, South Dakota, Oklahoma, Montana, and Idaho.

TABLE 33: STATE AND LOCAL TAX COLLECTIONS, BY STATES
AND GEOGRAPHIC DIVISIONS, FISCAL YEARS 1922, 1926
AND 1927

(Computed by National Industrial Conference Board)

States and Geographic Divisions	Amounts (in thousands)			Per Capita			Per Cent Increase or (—) Decrease of Per Capita Taxes	
	1922	1926	1927	1922	1926	1927	1926 over 1922	1927 over 1926
Maine.....	\$27,925	\$35,136	\$37,354	\$35.99	\$44.48	\$47.10	23.59	5.89
New Hampshire.....	19,359	23,220	24,013	43.31	51.15	52.78	18.10	3.19
Vermont.....	12,052	14,577	15,705	34.20	41.36	44.56	20.94	7.74
Massachusetts.....	209,112	270,333	277,906	52.40	64.41	65.51	22.92	1.71
Rhode Island.....	24,001	29,002	31,127	37.50	41.85	44.21	11.60	5.64
Connecticut.....	63,435	82,541	87,351	43.39	51.40	53.39	18.46	3.87
New England.....	355,884	454,809	473,456	46.41	56.20	57.87	21.09	2.97
New York.....	595,881	798,520	869,288	55.46	70.64	76.10	27.37	7.73
New Jersey.....	155,904	249,876	275,809	46.61	67.90	73.57	45.68	8.35
Pennsylvania.....	300,082	409,045	424,288	33.19	42.55	43.61	28.20	2.49
Middle Atlantic.....	1,051,867	1,457,441	1,569,385	45.47	59.25	63.02	30.31	6.36
Ohio.....	251,019	302,974	319,837	41.41	45.91	47.67	10.87	3.83
Indiana.....	121,356	149,989	153,504	40.45	48.01	48.73	18.69	1.50
Illinois.....	248,955	329,282	344,399	36.92	45.71	47.20	23.81	3.26
Michigan.....	186,672	247,264	277,579	47.50	56.25	61.82	18.42	9.90
Wisconsin.....	124,340	143,855	156,923	45.66	49.86	53.78	9.20	7.86
East North Central.....	932,342	1,173,364	1,252,242	41.51	48.47	50.98	16.77	5.18
Minnesota.....	121,241	146,634	153,474	48.85	55.31	57.14	13.22	3.31
Iowa.....	111,343	120,602	124,535	46.16	49.77	51.35	7.82	3.17
Missouri.....	95,025	126,552	132,214	27.64	36.18	37.67	30.90	4.12
North Dakota.....	29,358	33,443	32,622	45.58	52.17	50.89	14.46	-2.45
South Dakota.....	31,845	39,676	38,794	38.79	47.50	45.74	18.97	-2.20
Nebraska.....	58,011	62,342	62,732	43.68	45.01	44.94	3.04	-0.16
Kansas.....	71,123	91,916	96,763	39.73	50.48	52.93	27.06	4.85
West North Central.....	517,946	621,165	641,134	40.62	47.39	48.64	16.67	2.64
Delaware.....	8,005	11,199	11,265	34.96	46.66	46.36	33.47	-0.64
Maryland.....	45,763	62,677	66,789	30.57	39.67	41.82	27.97	5.42
District of Columbia.....	12,921	21,784	25,115	27.49	41.26	46.51	50.09	12.72
Virginia.....	46,618	65,939	72,374	19.55	25.18	28.43	33.91	8.59
West Virginia.....	42,294	62,026	64,619	27.50	37.16	38.10	35.13	2.53
North Carolina.....	46,162	80,698	84,564	17.31	28.24	29.19	63.14	3.36
South Carolina.....	23,420	39,731	40,693	13.50	21.76	22.06	61.19	1.38
Georgia.....	41,537	54,234	57,640	13.92	17.28	18.16	24.14	5.21
Florida.....	34,285	91,362	100,624	30.83	69.37	73.83	125.01	6.43
South Atlantic.....	301,005	489,650	523,683	20.59	31.24	32.94	51.72	5.44
Kentucky.....	46,609	60,882	65,539	18.99	24.12	25.82	27.01	7.05
Tennessee.....	42,912	56,346	59,345	17.99	22.83	23.46	26.90	4.60
Alabama.....	29,229	40,280	45,053	12.12	15.95	17.68	36.60	10.85
Mississippi.....	35,725	50,013	53,963	19.95	27.92	30.11	39.95	7.92
East South Central.....	154,475	207,521	223,902	17.08	22.29	23.91	30.50	7.27
Arkansas.....	20,471	35,181	38,388	11.33	18.49	19.96	63.20	7.95
Louisiana.....	51,023	66,311	68,191	27.70	34.55	35.26	24.73	2.05
Oklahoma.....	53,074	84,626	85,580	24.79	36.13	35.90	45.74	-0.64
Texas.....	108,970	158,281	172,313	22.25	29.79	31.93	33.89	7.18
West South Central.....	253,538	344,399	364,472	21.85	30.01	31.32	37.35	4.37
Montana.....	24,253	29,007	28,430	40.35	41.74	39.82	34.74	-4.60
Idaho.....	18,717	23,399	23,724	40.34	44.83	44.43	11.13	-0.89
Wyoming.....	8,490	11,567	11,918	40.62	49.01	49.45	20.65	0.90
Colorado.....	46,016	52,079	53,998	46.81	49.18	50.28	5.06	2.24
New Mexico.....	11,046	10,323	10,730	29.85	26.61	27.37	-10.85	2.86
Arizona.....	19,692	19,836	20,638	52.65	44.58	44.96	-15.33	0.85
Utah.....	17,034	21,978	22,935	36.01	42.76	43.94	18.74	2.76
Nevada.....	5,764	6,542	6,687	74.46	84.51	86.39	13.50	2.22
Mountain.....	151,012	174,731	179,060	42.53	44.39	44.62	4.37	0.52
Washington.....	68,776	81,412	88,010	48.37	52.93	56.34	9.43	6.44
Oregon.....	41,402	57,389	60,756	50.68	65.44	68.27	29.12	4.32
California.....	207,372	336,829	346,490	55.34	78.02	78.16	40.98	0.18
Pacific.....	317,550	475,630	495,256	53.05	70.65	71.93	33.18	1.81
United States.....	\$4,015,619	\$5,398,710	\$5,722,590	\$36.54	\$46.09	\$48.24	26.14	4.66

Of the regional divisions, the largest increase in state tax collections from 1922 to 1926 occurred in the West South Central group, in which collections increased 86%; the smallest increase, 21%, was in the Mountain group. The increase in state tax collections for the fiscal year ended in 1927 over those for 1926 was greatest in the Middle Atlantic division, amounting to more than 10%. The Pacific group collected only 4% more on account of state taxes in the fiscal year ended in 1927 than in the preceding year.

Since the functions allotted to the state governments vary widely from state to state, considerable variation is to be expected in the proportions which state taxes are of total state and local taxes. The variation in the extent to which highway and school expenditures are financed out of state funds accounts in large measure for differences in these proportions. Delaware had the largest proportion of state taxes to combined state and local taxes for the fiscal year ended in 1927, and Ohio had the smallest proportion; the respective proportions were 57.1% and 11.5%. The same states were first and last in this respect in the fiscal year ended in 1926, while in the year ended in 1922 Delaware had the largest proportion of state taxes to state and local taxes, 49.0%, and Kansas had the smallest, 12.2%.

The regional differences in the proportions of state taxes to state and local taxes are not so pronounced as might be expected. For the fiscal year ended in 1927 the highest proportion was 32.4%, for the West South Central group; and the lowest was 19.2%, for the East North Central group. The proportion for the United States was approximately 24%. Since the proportions for regional groups do not vary so widely from the proportion for the United States as a whole as the proportions for individual states, it would seem to follow that the states within a given regional group do not exhibit common characteristics in this respect. Examination of the proportions for individual states and regional groups, presented in Table 34, indicates that such is the case, the only exception being the Middle Atlantic division. The proportions for the three states in this group are quite close to the proportion computed from the combined data for the group.

The proportions referred to above indicate the relative

TABLE 34: STATE TAX COLLECTIONS, BY STATES AND GEOGRAPHIC DIVISIONS, FISCAL YEARS 1922, 1926 AND 1927

(Source: U. S. Bureau of the Census, "Financial Statistics of States" Series. Computed by National Industrial Conference Board)

States and Geographic Divisions	Amounts (in thousands)			Per Cent In- crease or (-) Decrease		Per Cent State Taxes are of Combined State and Local Taxes		
	1922	1926	1927	1926 over 1922	1927 over 1926	1922	1926	1927
Maine.....	\$9,170	\$12,760	\$14,339	39.14	12.37	32.84	36.32	38.39
New Hampshire.....	5,562	5,844	6,213	5.07	6.31	28.73	25.17	25.87
Vermont.....	3,946	5,119	5,739	29.73	12.11	32.74	35.12	36.54
Massachusetts.....	38,098	42,332	46,447	11.11	9.72	18.22	15.66	16.71
Rhode Island.....	6,438	7,934	8,846	23.24	11.49	26.82	27.36	28.42
Connecticut.....	16,508	23,775	25,866	44.02	8.79	26.02	28.80	29.61
New England.....	79,722	97,764	107,450	22.63	9.91	22.40	21.50	22.69
New York.....	117,057	166,601	185,324	42.32	11.24	19.64	20.86	21.32
New Jersey.....	36,563	56,511	64,653	55.41	14.41	23.32	22.62	23.44
Pennsylvania.....	67,189	98,189	105,678	48.57	5.87	22.52	24.40	24.91
Middle Atlantic.....	220,609	322,935	355,655	46.38	10.13	20.97	22.16	22.66
Ohio.....	41,040	34,653	36,637	-15.56	5.73	16.35	11.44	11.45
Indiana.....	18,478	32,216	32,778	74.35	1.74	15.23	21.48	21.35
Illinois.....	35,561	67,505	71,508	89.83	5.93	14.28	20.50	20.76
Michigan.....	45,997	63,297	63,647	37.61	0.55	24.64	25.60	22.93
Wisconsin.....	26,170	31,730	36,329	21.25	14.49	21.05	22.06	23.15
East North Central.....	167,246	229,401	240,899	37.16	5.01	17.94	19.55	19.24
Minnesota.....	29,635	41,926	47,218	41.47	12.62	24.44	28.59	30.77
Iowa.....	21,983	26,993	27,495	22.79	1.86	19.74	22.38	22.08
Missouri.....	16,460	29,955	31,324	81.99	4.57	17.32	23.67	23.69
North Dakota.....	4,847	7,795	7,194	59.38	-6.99	16.51	23.13	22.08
South Dakota.....	4,289	9,093	9,124	112.01	0.34	13.47	22.92	23.52
Nebraska.....	10,577	11,877	11,544	12.29	-2.80	18.23	19.05	18.40
Kansas.....	8,639	17,744	20,070	105.39	13.11	12.15	19.30	20.74
West North Central.....	96,430	145,323	153,969	50.70	5.95	18.62	23.40	24.02
Delaware.....	3,919	6,359	6,433	62.26	1.16	48.96	56.78	57.11
Maryland.....	12,442	15,889	17,306	27.70	8.92	27.19	25.35	25.91
Virginia.....	18,288	25,224	29,813	37.93	18.19	39.23	38.25	41.19
West Virginia.....	9,600	15,532	17,136	61.79	10.33	22.70	25.04	26.52
North Carolina.....	9,933	23,659	25,665	138.19	8.48	21.52	29.32	30.35
South Carolina.....	6,999	13,813	14,134	97.36	2.32	29.88	34.77	34.73
Georgia.....	10,869	17,445	19,729	60.50	13.09	26.17	32.17	34.23
Florida.....	8,588	24,025	21,529	179.75	-10.39	25.05	26.30	21.40
South Atlantic.....	80,638	141,946	151,745	76.03	6.90	26.79	28.99	28.98
Kentucky.....	15,376	20,783	23,432	35.17	12.75	32.99	34.14	35.75
Tennessee.....	10,121	16,816	17,841	66.15	6.10	23.59	29.84	30.06
Alabama.....	10,305	12,867	15,510	24.86	20.54	35.26	31.94	34.42
Mississippi.....	9,080	11,991	11,197	32.06	-6.62	25.42	23.98	20.75
East South Central.....	44,882	62,457	67,980	39.16	8.84	29.05	30.10	30.36
Arkansas.....	6,444	16,142	16,719	150.50	3.57	31.48	45.88	43.55
Louisiana.....	16,701	20,720	21,783	24.06	5.13	32.73	31.25	31.94
Oklahoma.....	6,715	19,042	19,411	183.57	1.94	12.65	22.50	22.68
Texas.....	30,210	55,792	60,328	84.68	8.13	27.72	35.25	35.01
West South Central.....	60,070	111,696	118,241	85.94	5.86	25.72	32.43	32.44
Montana.....	3,416	4,661	4,844	36.45	3.93	14.08	16.07	17.04
Idaho.....	3,480	4,171	4,356	19.86	4.44	18.59	17.83	18.36
Wyoming.....	2,248	3,146	3,027	39.95	-3.78	26.48	27.20	25.40
Colorado.....	8,955	10,681	11,488	19.27	7.56	19.46	20.51	21.27
New Mexico.....	3,091	2,814	3,438	-8.96	22.17	27.98	27.26	32.04
Arizona.....	6,315	6,117	5,989	-3.14	-2.09	32.07	30.84	29.02
Utah.....	5,067	7,708	8,089	52.12	4.94	29.75	35.07	35.27
Nevada.....	1,477	1,853	1,887	25.46	1.83	25.62	28.32	28.22
Mountain.....	34,049	41,151	43,118	20.86	4.78	22.55	23.55	24.08
Washington.....	17,887	23,959	29,488	33.95	23.08	26.01	29.43	33.51
Oregon.....	12,910	17,077	17,693	32.28	3.61	31.18	29.76	29.12
California.....	43,699	70,577	68,889	61.51	-2.39	21.07	20.95	19.88
Pacific.....	74,496	111,613	116,070	49.82	3.99	23.46	23.47	23.44
United States.....	\$858,142	\$1,264,286	\$1,355,127	47.33	7.19	21.37	23.42	23.68

rates of increase in state tax collections and local tax collections. For example, the proportion for the state of New York was higher in 1926 than in 1922, and higher in 1927 than in 1926, indicating that state taxes have been increasing at a more rapid rate than local taxes. The figures presented in Table 34 clearly indicate that, for the United States as a whole, state tax collections during the period 1922 to 1927 increased more rapidly than local tax collections, and that the increase in the proportion of state tax collections to local tax collections was sufficiently marked to be significant. This increase may be attributed in part to the increasing amounts raised for the purpose of state aid to the localities. In only fourteen states and one regional group, the Pacific, were the proportions for the fiscal year ended in 1927 lower than for that ended in 1922. The fourteen states showing decreases are widely scattered among the geographic divisions, with the Middle Atlantic and West North Central divisions the only ones in which no state showed a decrease in the proportion. The decrease in the proportion for the Pacific group is so slight that it may be regarded as negligible.

Local Tax Collections

Local tax collections for the fiscal year ended in 1928 amounted to \$4,630 millions, an amount more than twice as large as combined federal, state and local tax collections in 1913. Local tax collections in the fiscal year ended in 1928 were 6% greater than for the preceding year, in which \$4,367 millions were collected. In each year since 1922 the amount of local tax collections has been substantially larger than in the preceding year, although the rate of increase up to and including the fiscal year ended in 1927 was not so great as in the case of state tax collections.

In each of the years for which data are presented in Table 35, local collections in New York exceeded those of any other two states. For the fiscal year ended in 1928, there was collected in New York on account of local taxes the sum of \$746 millions, or 16% of all local tax collections in the United States. Local taxes collected in the Middle Atlantic group, consisting of only three states, amounted to 28% of all local collections for the fiscal year ended in 1928, and reached the

TABLE 35: LOCAL TAX COLLECTIONS, BY STATES AND
GEOGRAPHIC DIVISIONS, FISCAL YEARS 1926,
1927 AND 1928¹

(Computed by National Industrial Conference Board)

States and Geographic Divisions	Amounts (in thousands)			Per Cent Increase or (-) Decrease	
	1926	1927	1928	1927 over 1926	1928 over 1927
Maine.....	\$22,376	\$23,015	\$23,658	2.86	2.79
New Hampshire.....	17,376	17,800	18,262	2.44	2.60
Vermont.....	9,458	9,966	10,307	5.37	3.42
Massachusetts.....	228,001	231,459	233,969	1.52	1.08
Rhode Island.....	21,068	22,281	23,675	5.76	6.26
Connecticut.....	58,766	61,485	64,751	4.63	5.31
New England.....	357,045	366,006	374,622	2.51	2.35
New York.....	631,919	683,964	745,605	8.24	9.01
New Jersey.....	193,365	211,156	226,333	9.20	7.19
Pennsylvania.....	309,222	318,610	328,016	3.04	2.95
Middle Atlantic.....	1,134,506	1,213,730	1,299,934	6.98	7.10
Ohio.....	268,321	283,200	297,532	5.55	5.06
Indiana.....	117,773	120,726	124,569	2.51	3.18
Illinois.....	261,777	272,891	307,691	4.25	12.75
Michigan.....	183,967	213,932	232,092	16.29	8.49
Wisconsin.....	112,125	120,594	124,387	7.55	3.15
East North Central.....	943,963	1,011,343	1,086,261	7.14	7.41
Minnesota.....	104,708	106,256	109,125	1.48	2.70
Iowa.....	93,609	97,040	98,985	3.67	2.00
Missouri.....	96,597	100,890	102,488	4.44	1.58
North Dakota.....	25,708	25,428	27,335	-1.09	7.50
South Dakota.....	30,583	29,670	31,153	-2.99	5.00
Nebraska.....	50,465	51,188	56,153	1.43	9.70
Kansas.....	74,172	76,693	79,858	3.40	4.13
West North Central.....	475,842	487,165	505,097	2.38	3.68
Delaware.....	4,840	4,832	5,096	-0.17	5.46
Maryland.....	46,788	49,483	52,005	5.76	5.10
District of Columbia.....	21,784	25,115	27,307	15.29	8.73
Virginia.....	40,715	42,561	44,383	4.53	4.28
West Virginia.....	46,494	47,483	49,097	2.13	3.40
North Carolina.....	57,039	58,899	63,732	3.26	8.21
South Carolina.....	25,918	26,559	27,255	2.47	2.62
Georgia.....	36,789	37,911	39,809	3.05	5.01
Florida.....	67,337	79,095	78,202	17.46	-1.13
South Atlantic.....	347,704	371,938	386,886	6.97	4.02
Kentucky.....	40,099	42,107	44,384	5.01	5.41
Tennessee.....	39,530	41,504	43,787	4.99	5.50
Alabama.....	27,413	29,545	31,317	7.78	6.00
Mississippi.....	38,022	42,766	46,229	12.48	8.10
East South Central.....	145,064	155,922	165,717	7.48	6.28
Arkansas.....	19,039	21,669	22,080	13.81	1.90
Louisiana.....	45,591	46,408	47,203	1.79	1.71
Oklahoma.....	65,594	66,169	68,713	0.89	3.85
Texas.....	102,489	111,985	122,037	9.27	8.98
West South Central.....	232,703	246,231	260,035	5.81	5.61
Montana.....	24,346	23,586	24,424	-3.12	3.55
Idaho.....	19,228	19,368	19,523	0.73	0.80
Wyoming.....	8,421	8,891	9,241	5.58	3.94
Colorado.....	41,398	42,510	44,002	2.69	3.51
New Mexico.....	7,509	7,292	7,408	-2.89	1.59
Arizona.....	13,719	14,649	15,393	6.78	5.08
Utah.....	14,270	14,846	14,723	4.04	-0.83
Nevada.....	4,689	4,800	4,913	2.37	2.35
Mountain.....	133,580	135,942	139,627	1.77	2.71
Washington.....	57,453	58,522	61,804	1.86	5.61
Oregon.....	40,312	43,063	44,843	6.82	4.13
California.....	266,252	277,601	304,999	4.26	9.87
Pacific.....	364,017	379,186	411,646	4.17	8.56
United States.....	\$4,134,424	\$4,367,463	\$4,629,845	5.64	6.01

¹ For sources, see Appendix B, p. 143 of this volume.

enormous total of \$1,300 millions, an amount only \$16 millions less than the local taxes collected in all states west of the Mississippi River.

In two states, Florida and Utah, local tax collections for the fiscal year ended in 1928 were less than for the preceding year, but the decrease was slight in both cases. Local taxes for the fiscal year ended in 1927 were smaller in amount in five states than in the preceding year. All of the regional groups showed increases for the fiscal years ended in 1927 and 1928. The greatest percentage increase in local tax collections for the fiscal year ended in 1928 was 12.8% for Illinois. Local taxes in Florida showed the largest percentage increase for the fiscal year ended in 1927. Among the regional groups, the greatest increase for 1928, 8.6%, occurred in the Pacific division, and the smallest increase, 2.4%, in the New England division. In the preceding year the largest and smallest increases were in the East South Central and Mountain divisions, respectively.

CHAPTER IV

SOURCES OF TAX REVENUE

WHILE the previous chapter dealt with tax revenues in the aggregate, it is proposed in this chapter to consider in detail the amount and proportion of revenue obtained by federal, state, and local governments from each of the several sources of tax revenues. Changes in the proportions of different taxes to total tax revenues are particularly significant and will receive special consideration.

SOURCES OF FEDERAL TAX REVENUE

The most significant feature of the federal revenue system is the predominance of income taxes. In spite of rate reductions that have been effected during the post-war years, the proportion of federal revenues derived from income taxes was practically as great for the fiscal year ended in 1929 as in 1921. The volume of federal taxation was much greater in 1921, but since other federal tax collections as well as income tax collections decreased in amount, the proportion of federal revenue attributable to income taxes remains at the same level in 1929 as in 1921. In 1929, 65.7% of federal tax receipts were derived from personal and corporation income taxes as compared with 65.8% for 1921. Federal income tax collections amounted to \$2,331 millions in 1929 and \$3,228 millions in 1921; income tax collections measured in actual dollars were therefore almost 28% less in 1929 than in 1921.

The place of income taxation in the federal fiscal system is clearly brought out by comparisons which go back to a period not long since, before the taxation of the incomes of corporations and of individuals formed an integral part of the federal fiscal system. In the last twenty-five years federal taxation has greatly increased. Two factors have had an important share in this growth of taxation; first, the greater needs of government and, second, the changes in the purchasing

power of the dollar, which are reflected in the costs of government as well as in all other valuations. The growth of population in itself brings about an increase in governmental expenditures, and any comparison of the costs or receipts of government which does not take this factor into account is incomplete. If, further, an approximate measure of the relative burden of tax collections at different periods is to be obtained, changes in the purchasing power of the dollar must be considered. This is conveniently done by expressing the figures for tax collections in terms of dollars of equal purchasing power.

Table 36 shows in millions of dollars the total federal tax receipts and per capita receipts for selected years, both in actual dollars and in "1913" dollars, and distinguishes between receipts from income and excess profits taxes and all other taxes.

TABLE 36: FEDERAL TAX COLLECTIONS IN SPECIFIED FISCAL YEARS¹

(Source: Annual Reports of the Secretary of the Treasury)

Amounts (in millions)

Year	Actual Dollars			"1913" Dollars		
	All Taxes	Income and Profit Taxes	Other Taxes	All Taxes	Income and Profit Taxes	Other Taxes
1908	\$543	..	\$543	\$602	..	\$602
1912	639	\$28	611	645	\$29	616
1914	679	71	608	695	73	622
1919	4,036	2,601	1,435	2,032	1,309	723
1922	3,561	2,087	1,474	2,571	1,507	1,064
1929	3,550	2,331	1,219	2,554	1,677	877
<i>Per Capita</i>						
1908	\$6.09	..	\$6.09	\$6.76	..	\$6.76
1912	6.72	\$0.30	6.42	6.78	\$0.30	6.48
1914	6.93	0.73	6.20	7.10	0.75	6.35
1919	38.44	24.77	13.67	19.35	12.47	6.88
1922	32.40	18.99	13.41	23.40	13.71	9.69
1929	29.58	19.43	10.15	21.28	13.97	7.31

¹On basis of reports of collections.

It will be observed that the total tax collections in actual dollars in the fiscal year ended in 1929 were more than six times those of 1908, but that if income and profit taxes are

deducted from the total, other forms of taxes were little more than twice as large. This did not mean a corresponding increase in tax burdens, since in "1913" dollars total taxes were only a little more than four times as great as in 1908, while taxes other than income and profit taxes increased only 46%.

In the meantime, of course, the population of the United States had grown and the approximate tax burden of the individual, as expressed in per capita figures in "1913" dollars, showed a much smaller increase. Practically all of this increase was in the group of taxes described as income and profit taxes. In the final year of the series, however, these were exclusively taxes upon the income of corporations and individuals, since the taxes classed as profit taxes had been abandoned. On the other hand, the per capita increase of other taxes figured on the basis of "1913" dollars was less than 10%.

Separate figures for federal corporation and personal income tax collections in recent years are presented in Table 37. Reference to this table indicates that in each year beginning with the fiscal year ended in 1925, collections on account of the federal corporation income tax have exceeded personal income tax collections by a wide margin. Because of the reduction in the corporation income tax rate, effective on incomes for the calendar year 1928, the margin for the fiscal year ended in 1929 was not so great as for the three preceding years.

Customs duties rank second in importance as a source of federal revenue. While the aggregate receipts from this source vary from year to year, the proportion of total federal tax revenue attributable to customs has in recent years been relatively constant. Customs receipts for the fiscal year ended in 1929 amounted to \$611 millions as compared with \$574 millions for the preceding year, but because of the increased receipts from other sources the change in the proportion of total federal tax revenue derived from this source was negligible. Collections on account of customs in the fiscal year ended in 1929 amounted to 17.2% of total federal tax receipts, a proportion approximately equal to the average for the seven years beginning with the fiscal year ended in 1923.

TABLE 37: SOURCES OF FEDERAL TAX REVENUE, FISCAL YEARS 1922 TO 1929¹
(Source: Annual Reports of the Secretary of the Treasury)

Tax	1922	1923	1924	1925	1926	1927	1928	1929
<i>Amount (in thousands)</i>								
Corporation income tax	\$2,086,918	\$1,691,089	\$1,841,759	\$916,233	\$1,094,980	\$1,308,012	\$1,291,846	\$1,235,733
Personal income tax ²	139,419	126,705	102,967	845,426	879,124	911,940	882,728	1,095,541
Estate tax	80,612	81,568	87,472	108,940	119,216	100,340	60,087	61,897
Corporation capital stock tax	198,790	30,381	34,662	90,002	97,386	8,970	8,689	5,956
Transportation and transmission taxes	319,759	342,642	357,096	375,282	401,171	401,328	415,856	451,438
Sumptuary excises ³	56,685	92,737	112,871	94,142	113,703	66,438	51,628	5,546
Automobile and motorcycle excises ⁴	309,422	252,769	254,264	141,397	129,733	66,142	77,240	81,680
Other excises ⁵	5,846	3,854	5,088	12,718	1,287	2,513	2,462	1,263
Miscellaneous internal revenue ⁶								
Total internal revenue	\$3,197,451	\$2,621,745	\$2,796,179	\$2,584,140	\$2,836,000	\$2,865,683	\$2,790,536	\$2,939,054
Customs receipts	363,624	568,174	552,818	555,202	586,697	612,928	573,969	610,900
Total tax revenue	\$3,561,075	\$3,189,919	\$3,348,997	\$3,139,342	\$3,422,697	\$3,478,611	\$3,364,505	\$3,549,954
<i>Percentage Distribution</i>								
Corporation income tax	58.6	53.0	55.0	29.2	32.0	37.6	38.3	34.8
Personal income tax ²	3.9	4.0	3.1	26.9	25.7	26.2	26.2	30.9
Estate tax	2.2	2.6	2.6	3.5	3.5	2.9	1.8	1.7
Corporation capital stock tax	5.6	1.0	1.0	2.9	2.9	0.3	0.3	0.2
Transportation and transmission taxes	9.0	10.7	10.6	11.9	11.7	11.5	12.4	12.7
Sumptuary excises ³	1.6	2.9	3.4	3.0	3.3	1.9	1.5	0.2
Automobile and motorcycle excises ⁴	8.7	7.9	7.6	4.5	3.8	1.9	2.3	2.3
Other excises ⁵	0.2	0.1	0.2	0.4	7	0.1	0.1	7
Miscellaneous internal revenue ⁶								
Total internal revenue	89.8	82.2	83.5	82.3	82.9	82.4	82.9	82.8
Customs receipts	10.2	17.8	16.5	17.7	17.1	17.6	17.1	17.2
Total tax revenue	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ On basis of reports of collections.

² Includes excess profits tax.

³ Includes tax on spirits, fermented liquors, tobacco, oleomargarine, opium and narcotics.

⁴ Includes only collections on passenger automobiles and motorcycles.

⁵ Includes tax on manufactures and products (other than automobiles), sales, stamps, playing cards, insurance, beverages (non-alcoholic), occupations (special), admissions and dues.

⁶ Includes receipts under national prohibition act, collections through customs offices, delinquent taxes, etc.

⁷ Less than 0.05%.

Collections on account of sumptuary excises¹ amounted to \$451 millions in the fiscal year ended in 1929, or to almost 13% of total federal tax collections. This source of revenue has shown an increased yield in each year since the fiscal year ended in 1922, when only \$320 millions, or 9% of total federal tax revenues, was derived from this source. Increased receipts from tobacco taxes have contributed very largely to the increase in receipts from this source.

The federal estate tax has declined in importance as a producer of revenue. Credits allowed on account of state inheritance and estate tax payments by the 1924 and 1926 Revenue Acts resulted ultimately in lower yields from this source. Federal estate tax collections in the fiscal year ended in 1929 amounted to only \$62 millions, or less than 2% of total federal tax collections. The yield of this tax in 1929 was only slightly more than one-half as large as in 1926. Receipts from this source vary considerably from year to year because of differences in the values of taxable estates. However, since a comparatively small amount of tax revenue is derived from the estate tax, the variations in yield are not particularly important.

More than 97% of all federal revenue in the fiscal year ended in 1929 was derived from the four sources which have been considered. Changes in the yield of the minor sources of tax revenue and in the proportion which they bear to total federal tax revenues are shown in detail in Table 37.

GEOGRAPHICAL DISTRIBUTION OF FEDERAL TAX COLLECTIONS²

Federal income tax collections during the fiscal year ended in 1928 were larger in seventeen states and the District of Columbia than in the preceding year, but marked decreases occurred in a number of important industrial states, as is shown in Table 38. For the fiscal year ended in 1927, thirty-

¹ See footnote 3, Table 37, for taxes classified as sumptuary excises.

² This section and the accompanying tables should not be construed as representing the federal tax burden in the various states. The corporation income taxes, automobile taxes and tobacco taxes paid in a given state do not necessarily form a part of the federal tax burden of that state. The same applies to other federal taxes but to a less extent.

TABLE 38: SOURCES OF FEDERAL TAX REVENUE, BY STATES AND GEOGRAPHIC DIVISIONS, FISCAL YEARS 1926, 1927 AND 1928

(Source: Annual Reports of the Secretary of the Treasury. Computed by National Industrial Conference Board)

(Amounts in thousands)

States and Geographic Divisions	1926					1927					1928				
	Income Taxes	Miscellaneous Internal Revenue	Customs ¹	Total Taxes		Income Taxes	Miscellaneous Internal Revenue	Customs ¹	Total Taxes		Income Taxes	Miscellaneous Internal Revenue	Customs ¹	Total Taxes	
Maine.....	\$8,591	\$1,192	\$3,989	\$13,772		\$8,564	\$1,902	\$4,105	\$14,571		\$8,086	\$384	\$3,821	\$12,291	
New Hampshire.....	3,013	1,113	2,293	6,419		3,007	497	2,363	5,867		3,246	749	2,196	6,191	
Vermont.....	2,661	1,740	1,784	5,185		2,656	164	1,827	4,647		2,221	82	1,699	4,002	
Massachusetts.....	100,017	18,830	21,010	139,857		105,269	9,481	21,821	136,571		98,530	6,887	20,456	125,873	
Rhode Island.....	14,461	2,434	3,445	20,340		12,905	803	3,601	17,313		13,572	1,199	3,392	18,163	
Connecticut.....	29,002	6,535	7,966	43,503		33,800	2,311	8,349	44,460		34,381	1,733	7,888	44,002	
New England.....	157,745	30,844	40,487	229,076		166,201	15,158	42,070	223,429		160,036	11,034	39,452	210,522	
New York.....	569,505	164,224	56,589	790,318		649,299	105,780	58,769	813,848		646,604	106,581	55,088	808,273	
New Jersey.....	72,252	40,120	18,249	130,621		81,301	32,662	19,135	133,098		82,956	22,646	18,076	123,678	
Pennsylvania.....	195,396	56,922	48,038	300,356		222,916	35,848	49,986	308,750		216,938	29,804	46,919	293,661	
Middle Atlantic.....	837,153	261,266	122,876	1,221,295		953,516	174,290	127,890	1,255,696		946,498	159,031	120,083	1,225,612	
Ohio.....	109,071	46,685	32,801	188,557		117,649	29,782	34,317	181,748		113,764	25,923	32,360	172,047	
Indiana.....	24,923	14,715	15,687	55,325		28,406	7,709	16,242	52,357		27,246	7,449	15,188	49,883	
Illinois.....	176,861	39,858	35,954	252,673		194,971	22,408	37,447	254,826		201,135	20,885	35,180	257,200	
Michigan.....	122,570	103,059	21,717	247,346		141,639	56,359	27,856	220,854		128,483	45,495	21,652	195,630	
Wisconsin.....	28,650	10,945	14,430	54,025		33,682	5,156	15,000	55,838		43,492	4,660	14,072	62,224	
East North Central.....	462,075	215,262	120,589	797,926		518,347	121,414	125,862	765,623		514,120	104,412	118,452	732,984	
Minnesota.....	28,384	5,514	13,236	47,134		26,219	2,223	13,782	42,224		26,105	1,740	12,951	40,796	
Iowa.....	11,112	2,840	12,265	26,217		11,726	940	12,600	25,266		11,310	672	11,693	23,675	
Missouri.....	49,603	18,325	17,664	85,592		55,903	14,392	18,185	88,480		51,979	13,106	16,927	82,012	
North Dakota.....	778	240	3,252	4,270		740	59	3,331	4,130		748	40	3,089	3,877	
South Dakota.....	858	257	3,451	4,566		737	86	3,581	4,404		678	67	3,358	4,103	
Nebraska.....	6,173	1,286	6,949	14,408		5,808	370	7,198	13,376		5,333	400	6,733	12,466	
Kansas.....	15,563	1,873	9,189	26,625		19,627	588	9,470	29,685		18,686	620	8,815	28,121	
West North Central.....	112,471	30,335	66,006	208,812		120,760	18,658	68,147	207,565		114,839	16,645	63,566	195,050	

Delaware.....	9,540	2,092	1,205	12,837	14,319	1,057	1,248	16,624	20,011	1,006	1,173	22,190
District of Columbia.....	25,646	4,824	7,908	38,378	29,626	2,852	8,216	40,694	28,254	3,057	7,700	39,011
Virginia.....	15,191	1,875	2,603	19,669	16,020	2,207	2,747	20,974	16,361	824	2,603	19,788
West Virginia.....	17,827	42,959	12,604	73,990	20,780	58,380	13,094	92,254	21,891	61,804	12,276	95,971
North Carolina.....	11,654	3,975	8,305	23,934	15,751	2,606	8,678	27,035	13,353	2,530	8,180	24,063
South Carolina.....	17,678	174,726	14,254	206,658	19,204	186,447	14,860	220,511	20,332	204,964	13,969	239,285
South Carolina.....	4,176	721	9,148	14,045	3,826	250	9,494	13,570	3,737	160	8,901	12,798
Georgia.....	12,437	1,795	15,728	19,960	13,699	578	16,321	30,598	13,550	633	15,291	29,474
Florida.....	33,989	9,217	6,405	49,611	35,590	8,893	6,845	51,328	17,181	6,303	6,573	30,057
South Atlantic.....	148,138	242,184	78,160	468,482	168,815	263,270	81,503	513,588	154,690	281,281	76,666	512,637
Kentucky.....	14,639	12,206	12,716	39,561	16,257	11,423	13,124	40,804	15,001	9,010	12,236	36,247
Tennessee.....	11,398	5,860	12,411	21,398	13,724	4,089	12,831	30,644	13,351	4,485	11,984	29,820
Alabama.....	8,276	1,179	12,669	22,124	10,458	525	13,130	24,113	8,178	470	12,293	20,941
Mississippi.....	3,527	440	9,078	13,045	3,325	135	9,312	12,772	2,674	86	8,638	11,398
East South Central.....	37,840	19,685	46,874	104,399	43,764	16,172	48,397	108,333	39,204	14,051	45,151	98,406
Arkansas.....	4,392	542	9,534	14,468	5,054	205	9,896	15,155	4,224	108	9,273	13,605
Louisiana.....	12,582	3,765	9,633	25,980	15,396	2,083	9,975	27,454	12,181	2,034	9,324	23,539
Oklahoma.....	15,789	2,265	11,628	29,682	23,257	362	12,174	33,793	20,188	327	11,498	32,013
Texas.....	36,879	6,000	26,420	69,299	42,964	1,995	27,625	72,584	45,659	1,673	26,022	73,354
West South Central.....	69,642	12,572	57,215	139,429	86,671	4,645	59,670	150,986	82,232	4,142	56,117	142,511
Montana.....	1,968	7,133	3,404	12,505	2,376	1,956	3,611	7,943	2,825	153	3,444	6,422
Idaho.....	1,129	262	2,573	3,964	1,429	49	2,716	4,194	1,072	73	2,574	3,719
Wyoming.....	1,364	221	1,164	2,749	1,830	55	1,224	3,109	2,057	110	1,161	3,328
Colorado.....	11,976	2,855	5,270	20,101	12,657	816	5,505	18,978	11,452	427	5,177	17,056
New Mexico.....	635	105	1,948	2,688	658	22	2,016	2,696	772	17	1,893	2,682
Arizona.....	1,574	409	4,153	4,153	1,673	64	2,314	4,051	1,737	183	2,214	4,134
Utah.....	3,463	601	2,556	6,620	3,769	154	2,674	6,597	3,663	108	2,517	6,288
Nevada.....	451	135	392	978	501	83	402	986	690	113	372	1,175
Mountain.....	22,560	11,721	19,477	53,758	24,893	3,199	20,462	48,554	24,268	1,184	19,352	44,804
Washington.....	12,157	2,047	7,650	21,854	13,192	663	7,996	21,851	12,156	583	7,534	20,273
Oregon.....	6,399	1,091	4,375	11,865	6,198	514	4,561	11,273	5,816	294	4,290	10,400
California.....	101,713	33,347	21,191	156,251	112,309	27,179	22,442	161,930	114,437	22,781	21,377	158,595
Pacific.....	120,269	36,485	33,216	189,970	131,699	28,356	34,999	195,054	132,409	23,658	33,201	189,268
United States.....	\$1,967,893	\$860,354	\$584,900	\$3,413,147	\$2,214,666	\$645,162	\$609,000	\$3,468,828	\$2,168,316	\$615,438	\$572,040	\$3,355,794

¹ Distributed according to estimated population at the beginning of the fiscal year.

seven states and the District of Columbia showed larger federal income tax collections than for the fiscal year ended in 1926. In each geographic division, receipts from income taxes were greater in the fiscal year ended in 1927 than in the preceding year. For the fiscal year ended in 1928 they were lower than in 1927 in every division except the Pacific.

Although total internal revenue receipts other than income taxes were almost 25% lower for the fiscal year ended in 1927 than for that ended in 1926, and declined further in the fiscal year ended in 1928, larger receipts were reported for a number of states. Miscellaneous internal revenue receipts in Maine, Virginia, North Carolina and the District of Columbia showed substantial increases in the fiscal year ended in 1927. In Virginia and North Carolina the increases were caused by the larger yields from the tobacco excises. In fourteen states, including Virginia and North Carolina, miscellaneous internal revenue receipts were greater in amount in the fiscal year ended in 1928 than in the preceding year. With the exception of the South Atlantic division, miscellaneous internal revenue receipts were smaller in each regional group for the fiscal year ended in 1928 than in that ended in 1927 and smaller in the fiscal year ended in 1927 than in the preceding year.

Table 39 shows the proportion of the total federal internal revenue contributed by each state and geographic division. In each fiscal year for which data are presented, collections in the state of New York exceeded 25% of the total, and the proportion for that state in each year exceeded the proportion for the preceding year. The proportion of internal revenue collections in New York to the total amount of such collections was 27% for the fiscal year ended in 1928. Federal income tax collections in New York in the fiscal year ended in 1928 were almost three times as large as those in Pennsylvania, the second state. Miscellaneous internal revenue collections in New York have in recent years been smaller in amount than those in North Carolina. A considerable decline in collections in New York, together with an increase, largely in tobacco tax receipts, in North Carolina caused them to be almost twice as large in the latter state in the fiscal year ended in 1928.

Considering federal internal revenue collections as a whole,

TABLE 39: PERCENTAGE DISTRIBUTION OF FEDERAL INTERNAL REVENUE COLLECTIONS, BY STATES AND GEOGRAPHIC DIVISIONS, FISCAL YEARS 1926, 1927 AND 1928

(Source: Annual Reports of the Secretary of the Treasury. Computed by National Industrial Conference Board)

States and Geographic Divisions	1926			1927			1928		
	Income Taxes	Miscellaneous Internal Revenue	Total Internal Revenue	Income Taxes	Miscellaneous Internal Revenue	Total Internal Revenue	Income Taxes	Miscellaneous Internal Revenue	Total Internal Revenue
Maine.....	0.44	0.14	0.35	0.39	0.29	0.37	0.37	0.06	0.31
New Hampshire.....	0.15	0.13	0.14	0.13	0.08	0.12	0.15	0.12	0.14
Vermont.....	0.14	0.08	0.12	0.12	0.03	0.10	0.10	0.01	0.08
Massachusetts.....	5.08	2.19	4.20	4.75	1.47	4.01	4.54	1.12	3.79
Rhode Island.....	0.74	0.28	0.60	0.58	0.12	0.48	0.60	0.20	0.53
Connecticut.....	1.47	0.76	1.26	1.33	0.36	1.26	1.59	0.28	1.30
New England.....	8.02	3.58	6.67	7.50	2.35	6.34	7.38	1.79	6.15
New York.....	28.94	19.09	25.94	29.32	16.39	26.40	29.82	17.32	27.06
New Jersey.....	3.67	4.66	3.98	3.67	5.06	3.99	3.83	3.68	3.79
Pennsylvania.....	9.93	6.62	8.92	10.07	5.56	9.05	10.00	4.84	8.86
Middle Atlantic.....	42.54	30.37	38.84	43.06	27.01	39.44	43.65	25.84	39.71
Ohio.....	5.54	5.43	5.51	5.31	4.62	5.16	5.25	4.21	5.02
Indiana.....	1.27	1.71	1.40	1.28	1.19	1.22	1.21	1.21	1.25
Illinois.....	8.99	4.63	7.66	8.81	3.47	7.60	9.28	3.40	7.97
Michigan.....	6.23	11.98	7.98	6.40	8.74	6.92	5.92	7.39	6.25
Wisconsin.....	1.45	1.27	1.40	1.61	0.80	1.43	2.00	0.76	1.73
East North Central...	23.48	25.02	23.95	23.41	18.82	22.37	23.71	16.97	22.22
Minnesota.....	1.44	0.64	1.20	1.18	0.34	0.99	1.20	0.28	1.00
Iowa.....	0.57	0.33	0.49	0.53	0.15	0.44	0.52	0.11	0.43
Missouri.....	2.52	2.13	2.40	2.53	2.23	2.46	2.40	2.13	2.34
North Dakota.....	0.04	0.03	0.04	0.03	0.01	0.03	0.04	0.01	0.03
South Dakota.....	0.04	0.03	0.04	0.03	0.01	0.03	0.05	0.01	0.03
Nebraska.....	0.31	0.15	0.26	0.26	0.06	0.22	0.25	0.07	0.20
Kansas.....	0.79	0.22	0.62	0.89	0.09	0.70	0.86	0.10	0.69
West North Central...	5.71	3.53	5.05	5.45	2.89	4.87	5.30	2.71	4.72
Delaware.....	0.49	0.24	0.41	0.64	0.16	0.54	0.92	0.16	0.76
Maryland.....	1.30	0.56	1.08	1.34	0.44	1.14	1.30	0.50	1.12
District of Columbia	0.77	0.22	0.61	0.72	0.34	0.64	0.75	0.13	0.62
Virginia.....	0.91	4.99	2.15	0.94	9.05	2.77	1.01	10.04	3.01
West Virginia.....	0.59	0.46	0.55	0.71	0.41	0.64	0.62	0.41	0.57
North Carolina.....	0.90	20.31	6.80	0.87	28.90	7.19	0.94	33.30	8.09
South Carolina.....	0.21	0.09	0.17	0.17	0.04	0.14	0.17	0.03	0.14
Georgia.....	0.63	0.21	0.50	0.62	0.09	0.50	0.63	0.10	0.51
Florida.....	1.73	1.07	1.53	1.61	1.38	1.55	0.79	1.03	0.84
South Atlantic.....	7.53	28.15	13.80	7.62	40.81	15.11	7.13	45.70	15.66
Kentucky.....	0.74	1.42	0.95	0.74	1.77	0.97	0.69	1.46	0.86
Tennessee.....	0.58	0.68	0.61	0.62	0.64	0.62	0.62	0.73	0.64
Alabama.....	0.42	0.14	0.33	0.47	0.08	0.39	0.38	0.08	0.31
Mississippi.....	0.18	0.05	0.14	0.15	0.02	0.12	0.12	0.01	0.10
East South Central...	1.92	2.29	2.03	1.98	2.51	2.10	1.81	2.28	1.91
Arkansas.....	0.22	0.06	0.17	0.23	0.03	0.18	0.19	0.02	0.15
Louisiana.....	0.64	0.44	0.58	0.69	0.32	0.61	0.56	0.33	0.51
Oklahoma.....	0.80	0.26	0.64	1.05	0.06	0.83	0.93	0.05	0.74
Texas.....	1.88	0.70	1.52	1.94	0.31	1.57	2.11	0.27	1.70
West South Central...	3.54	1.46	2.91	3.91	0.72	3.19	3.79	0.67	3.10
Montana.....	0.10	0.83	0.32	0.11	0.30	0.15	0.13	0.02	0.11
Idaho.....	0.06	0.03	0.05	0.06	0.01	0.05	0.05	0.01	0.04
Wyoming.....	0.07	0.02	0.06	0.08	0.01	0.07	0.09	0.02	0.08
Colorado.....	0.61	0.33	0.52	0.57	0.13	0.47	0.53	0.07	0.43
New Mexico.....	0.03	0.01	0.03	0.03	1	0.02	0.04	1	0.03
Arizona.....	0.08	0.05	0.07	0.08	0.01	0.06	0.08	0.03	0.07
Utah.....	0.18	0.07	0.14	0.17	0.03	0.14	0.17	0.02	0.13
Nevada.....	0.02	0.02	0.02	0.02	0.01	0.02	0.03	0.02	0.03
Mountain.....	1.15	1.36	1.21	1.12	0.50	0.98	1.12	0.19	0.92
Washington.....	0.62	0.24	0.50	0.60	0.10	0.48	0.56	0.10	0.46
Oregon.....	0.32	0.13	0.26	0.28	0.08	0.24	0.27	0.05	0.22
California.....	5.17	3.87	4.78	5.07	4.21	4.88	5.28	3.70	4.93
Pacific.....	6.11	4.24	5.54	5.95	4.39	5.60	6.11	3.85	5.61
United States.....	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

¹ Less than 0.005%.

it is found that the Middle Atlantic states paid almost 40% of the total in the fiscal year ended in 1928. This division and the East North Central division together accounted for more than two-thirds of federal income tax collections and more than three-fifths of total federal internal revenue collections for the year. The states east of the Mississippi accounted for slightly more than 85% of the total federal internal revenue in each of the fiscal years ended in 1926, 1927, and 1928.

SOURCES OF STATE AND LOCAL TAX REVENUE

The revenue systems of many states include sources of tax revenue which are not used by the local governments, while in certain states the local governments obtain considerable amounts of tax revenue from sources not used by the state governments. The general property tax in Pennsylvania, for example, is the largest single source of local tax receipts but forms no part of the state revenue system. The relative importance of state tax collections in relation to combined state and local tax collections differs greatly as between states. These differences indicate the desirability of separate treatment of state and local tax revenues.

Sources of State Tax Revenue

Tables 40 to 43, inclusive, show the state tax revenues from the several sources, and their percentage distribution for the fiscal years ended in 1926 and 1927. In recent years there has been a decline in the importance of property taxes as sources of state revenue. During the fiscal year ended in 1927, property taxes collected by state governments amounted to \$470 millions, or 34.7% of total state tax collections, as compared with \$471 millions or 37.3% for the preceding year. Property tax receipts in the fiscal year ended in 1922 accounted for \$429 millions, or 50% of total state tax receipts. While both general property and special property taxes have declined in importance as producers of state revenue, the percentage decrease in the proportion of total taxes derived is the greater in the case of general or ad valorem property taxes. In the fiscal year

CHART 12: PROPORTION OF STATE PROPERTY TAXES TO TOTAL STATE TAXES, FISCAL YEAR 1927
(National Industrial Conference Board)

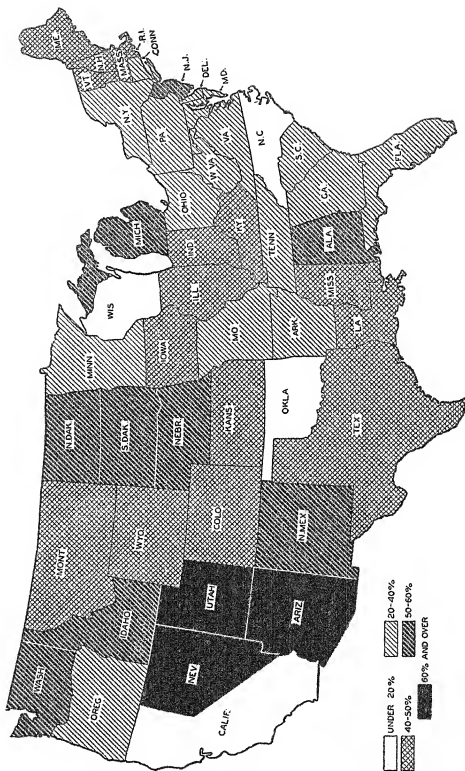


TABLE 40: SOURCES OF STATE TAX REVENUE, FISCAL YEAR 1926
(Source: "Financial Statistics of States")
(Amounts in thousands)

States and Geographic Divisions	Property Taxes	Poll Taxes	Gasoline Taxes	Motor Vehicle Licenses	Inheritance Taxes	Income Taxes	Other Special Taxes	Business Licenses	Non-Business Licenses—Permits	Total Taxes
Maine.....	\$5,833	\$4	\$1,426	\$2,258	\$668	..	\$190	\$2,246	135	\$12,760
New Hampshire.....	2,749	27	716	1,489	339	..	8	386	130	5,844
Vermont.....	2,268	28	508	1,657	226	..	22	323	87	5,119
Massachusetts.....	18,054	..	..	12,646	6,495	\$475	811	3,614	237	42,332
Rhode Island.....	3,924	..	503	1,902	405	..	27	1,152	21	7,934
Connecticut.....	5,514	..	2,344	5,636	2,467	..	307	7,167	340	23,775
New England.....	38,342	59	5,497	23,588	10,600	475	1,365	14,888	950	97,764
New York.....	42,821	..	..	20,892	22,296	14,405	26,359	39,170	658	166,601
New Jersey.....	35,500	..	..	11,228	7,104	..	399	2,024	256	56,511
Pennsylvania.....	33,504	..	8,081	23,361	14,071	14,405	2,721	16,600	1,485	99,823
Middle Atlantic.....	111,825	..	8,081	55,481	43,471	..	29,479	57,794	2,399	322,935
Ohio.....	7,814	..	5,479	5,102	2,099	..	967	12,747	445	34,653
Indiana.....	14,770	540	8,641	4,994	1,048	..	263	1,734	226	32,216
Illinois.....	31,633	..	..	13,416	6,805	..	69	15,174	408	67,505
Michigan.....	35,250	..	9,312	10,825	2,101	..	1,663	3,496	650	63,297
Wisconsin.....	8,264	..	4,860	7,294	2,035	6,251	176	2,480	370	31,730
East North Central.....	97,731	540	28,292	41,631	14,088	6,251	3,138	35,631	2,099	229,401
Minnesota.....	12,262	..	5,002	10,185	924	..	104	13,200	249	41,926
Iowa.....	11,533	..	1,768	9,789	1,111	..	148	2,486	158	26,993
Missouri.....	6,741	..	5,892	7,809	1,902	4,336	322	2,649	304	29,955
North Dakota.....	4,537	..	705	1,157	36	557	11	679	53	7,735
South Dakota.....	4,625	..	1,981	1,330	159	..	14	845	139	9,093
Nebraska.....	7,118	..	2,887	1,061	..	..	30	604	177	11,877
Kansas.....	8,719	..	3,883	3,485	512	..	56	981	108	17,744
West North Central.....	55,535	..	22,118	34,816	4,644	4,893	685	21,444	1,188	145,323
Delaware.....	2,198	..	370	761	141	869	1,670	319	31	6,359
Maryland.....	6,186	..	1,693	1,948	801	..	227	4,906	128	15,889

Virginia.....	7,773	650	2,873	4,395	611	1,751	989	5,927	255	25,224
West Virginia.....	3,958	305	2,497	3,378	801	..	63	4,366	164	15,532
North Carolina.....	821	..	7,160	5,061	828	6,054	249	3,424	62	23,659
South Carolina.....	3,458	..	2,680	2,721	257	1,491	338	2,805	63	13,813
Georgia.....	6,758	325	3,896	3,553	160	..	408	2,238	107	17,445
Florida.....	7,404	..	7,569	5,101	..	..	1,667	2,104	180	24,025
South Atlantic.....	38,556	1,280	28,738	26,918	3,599	10,165	5,611	26,089	990	141,946
Kentucky.....	10,265	..	3,476	3,991	640	..	182	2,137	92	20,783
Tennessee.....	4,622	..	3,519	3,364	648	..	527	4,054	82	16,816
Alabama.....	7,654	..	..	2,306	..	..	465	2,352	90	12,867
Mississippi.....	5,985	..	1,597	216	269	1,789	85	2,050	..	11,991
East South Central.....	28,526	..	8,592	9,877	1,557	1,789	1,259	10,593	264	62,457
Arkansas.....	5,542	..	3,340	3,582	292	..	1,367	1,900	119	16,142
Louisiana.....	10,042	..	2,657	3,813	607	..	55	3,434	112	20,720
Oklahoma.....	4,489	..	3,837	2,119	293	336	178	7,648	142	19,042
Texas.....	28,150	1,780	5,321	10,222	1,101	..	..	9,040	178	55,792
West South Central.....	48,223	1,780	15,155	19,736	2,293	336	1,600	22,022	551	111,696
Montana.....	1,993	..	452	..	515	..	112	1,389	200	4,661
Idaho.....	2,443	..	1,086	160	22	..	25	271	164	4,171
Wyoming.....	1,810	..	544	484	48	..	36	129	95	3,146
Colorado.....	5,843	..	2,086	829	876	..	87	724	236	10,681
New Mexico.....	1,609	..	691	329	23	..	..	116	46	2,814
Arizona.....	4,837	..	450	421	103	..	73	199	34	6,117
Utah.....	5,024	..	1,079	606	295	..	216	368	120	7,708
Nevada.....	1,300	..	205	208	2	..	82	56	..	1,853
Mountain.....	24,859	..	6,593	3,037	1,884	..	631	3,252	895	41,151
Washington.....	12,318	..	3,361	5,736	547	..	..	1,912	85	23,959
Oregon.....	5,467	..	3,248	5,966	529	314	31	1,187	335	17,077
California.....	9,557	..	7,075	5,148	7,420	..	..	40,826	551	70,577
Pacific.....	27,342	..	13,684	16,850	8,496	314	31	43,925	971	111,613
United States.....	\$470,939	\$3,659	\$136,750	\$233,934	\$90,632	\$38,628	\$43,799	\$235,638	\$10,307	\$1,264,286

¹ The amounts given in this column do not include receipts from corporation franchise taxes measured by net income, which are classified by the U. S. Bureau of the Census as business licenses. Local shares in state income tax receipts are not included in this table.

² Does not include gasoline taxes.

³ Does not include motor vehicle licenses.

TABLE 41: PERCENTAGE DISTRIBUTION OF STATE TAX REVENUE, FISCAL YEAR 1926
(Source: "Financial Statistics of States," Computed by National Industrial Conference Board)

States and Geographic Divisions	Property Taxes	Poll Taxes	Gasoline Taxes	Motor Vehicle Licenses	Inheritance Taxes	Income Taxes ¹	Other Special Taxes	Business Licenses ²	Non-Business Licenses ³
Maine.....	45.71	0.03	11.17	17.70	5.23	..	1.49	17.60	1.07
New Hampshire.....	47.04	0.45	12.25	25.49	5.81	..	0.14	6.60	2.22
Vermont.....	44.29	0.55	9.92	32.37	4.42	..	0.44	6.31	1.70
Massachusetts.....	42.65	..	..	29.87	15.34	1.12	1.92	8.54	0.56
Rhode Island.....	49.46	..	6.35	23.98	5.10	..	0.34	14.51	0.26
Connecticut.....	23.19	..	9.86	23.70	10.38	..	1.29	30.15	1.43
New England.....	39.22	0.06	5.62	26.17	10.84	0.49	1.40	15.23	0.97
New York.....	25.70	..	..	12.54	13.38	8.65	15.82	23.51	0.40
New Jersey.....	62.82	..	..	19.87	12.57	..	0.71	3.58	0.45
Pennsylvania.....	33.56	..	8.09	23.40	14.10	..	2.73	16.63	1.49
Middle Atlantic.....	34.63	..	2.50	17.18	13.46	4.46	9.13	17.90	0.74
Ohio.....	22.55	..	15.81	14.72	6.06	..	2.79	36.79	1.28
Indiana.....	45.85	1.68	26.82	15.50	3.25	..	0.82	5.38	0.70
Illinois.....	46.86	..	..	19.88	10.08	..	0.10	22.48	0.60
Michigan.....	55.69	..	14.71	17.10	3.32	..	2.63	5.52	1.03
Wisconsin.....	26.04	..	15.32	22.99	6.41	19.70	0.56	7.81	1.17
East North Central.....	42.60	0.24	12.33	18.15	6.14	2.72	1.37	15.53	0.92
Minnesota.....	29.25	..	11.93	24.30	2.20	..	0.25	31.48	0.59
Iowa.....	42.73	..	6.55	36.26	4.11	..	0.55	9.21	0.59
Missouri.....	22.50	..	19.67	26.07	6.35	14.48	1.07	8.84	1.02
North Dakota.....	58.65	..	9.12	14.95	0.47	7.21	0.14	8.78	0.68
South Dakota.....	50.86	..	21.78	14.63	1.75	..	0.16	9.29	1.53
Nebraska.....	59.93	..	24.31	8.93	..	..	0.25	5.09	1.49
Kansas.....	49.14	..	21.89	19.64	2.88	..	0.31	5.53	0.61
West North Central.....	38.21	..	15.22	23.96	3.19	3.37	0.47	14.76	0.82
Delaware.....	34.57	..	5.81	11.96	2.22	13.66	26.26	5.02	0.50
Maryland.....	38.94	..	10.65	12.26	5.04	..	1.43	30.88	0.80

Virginia.....	30.82	2.58	11.39	17.42	2.42	6.94	3.92	23.50	1.01
West Virginia.....	25.48	1.96	16.08	21.75	5.16	..	0.40	28.11	1.06
North Carolina.....	3.47	..	30.27	21.39	3.50	25.59	1.05	14.47	0.26
South Carolina.....	25.03	..	19.40	19.70	1.86	10.79	2.45	20.31	0.46
Georgia.....	38.74	1.86	22.33	20.37	0.92	..	2.34	12.83	0.61
Florida.....	30.82	..	31.50	21.23	..	..	6.94	8.76	0.75
South Atlantic.....	27.16	0.90	20.25	18.96	2.54	7.16	3.95	18.38	0.70
Kentucky.....	49.39	..	16.73	19.20	3.08	..	0.88	10.28	0.44
Tennessee.....	27.48	..	20.92	20.01	3.86	..	3.13	24.11	0.49
Alabama.....	59.49	..	..	17.92	..	..	3.61	18.28	0.70
Mississippi.....	49.91	..	13.32	1.81	2.24	14.92	0.71	17.09	..
East South Central.....	45.67	..	13.76	15.81	2.49	2.87	2.02	16.96	0.42
Arkansas.....	34.33	..	20.69	22.19	1.81	..	8.47	11.77	0.74
Louisiana.....	48.47	..	12.82	18.40	2.93	..	0.26	16.58	0.54
Oklahoma.....	23.57	..	20.15	11.13	1.54	1.76	0.94	40.16	0.75
Texas.....	50.46	3.19	9.54	18.32	1.97	..	..	16.20	0.32
West South Central.....	43.17	1.60	13.57	17.67	2.05	0.30	1.43	19.72	0.49
Montana.....	42.77	..	9.69	..	11.04	..	2.41	29.81	4.28
Idaho.....	58.58	..	26.04	3.83	0.53	..	0.60	6.50	3.92
Wyoming.....	57.52	..	17.29	15.38	1.54	..	1.14	4.09	3.04
Colorado.....	54.71	..	19.33	7.76	8.20	..	0.81	6.78	2.21
New Mexico.....	57.18	..	24.54	11.68	0.83	..	..	4.14	1.63
Arizona.....	79.08	..	7.36	6.88	1.68	..	1.20	3.24	0.56
Utah.....	65.17	..	14.00	7.86	3.83	..	2.80	4.78	1.56
Nevada.....	70.12	..	11.11	11.26	0.10	..	4.43	2.98	..
Mountain.....	60.41	..	16.02	7.38	4.58	..	1.53	7.90	2.18
Washington.....	51.41	..	14.03	23.94	2.28	..	..	7.98	0.36
Oregon.....	32.02	..	19.02	34.94	3.09	1.84	0.18	6.95	1.96
California.....	13.54	..	10.02	7.30	10.51	..	..	57.85	0.78
Pacific.....	24.50	..	12.26	15.10	7.61	0.28	0.03	39.35	0.87
United States.....	37.25	0.29	10.82	18.50	7.17	3.06	3.46	18.64	0.81

³ Does not include motor vehicle licenses.

¹ See footnote 1, Table 40.
² Does not include gasoline taxes.

TABLE 42: SOURCES OF STATE TAX REVENUE, FISCAL YEAR 1927
(Source: "Financial Statistics of States")
(Amounts in thousands)

States and Geographic Divisions	Property Taxes	Poll Taxes	Gasoline Taxes	Motor Vehicle Licenses	Inheritance Taxes	Income Taxes ¹	Other Special Taxes	Business Licenses ²	Non-Business Licenses—Permits ³	Total Taxes
Maine.....	\$5,908	\$4	\$2,004	\$2,572	\$799	..	\$151	\$2,786	\$115	\$14,339
New Hampshire.....	2,861	16	770	1,631	316	..	25	430	164	6,213
Vermont.....	2,298	28	613	1,875	434	..	25	378	88	5,739
Massachusetts.....	18,617	..	..	11,833	10,750	\$592	841	3,558	256	46,447
Rhode Island.....	4,068	..	767	2,026	603	..	97	1,258	27	8,846
Connecticut.....	5,398	..	2,840	6,273	2,597	..	222	8,148	388	25,866
New England.....	39,150	48	6,994	26,210	15,499	592	1,361	16,558	1,038	107,450
New York.....	38,252	..	..	23,467	24,564	26,258	25,151	46,811	821	185,324
New Jersey.....	37,765	..	..	12,440	11,295	..	640	2,245	268	64,653
Pennsylvania.....	34,092	..	9,182	25,121	17,300	..	2,161	16,210	1,612	105,678
Middle Atlantic.....	110,109	..	9,182	61,028	53,159	26,258	27,952	65,266	2,701	355,655
Ohio.....	7,950	..	5,887	5,464	2,484	..	673	13,705	474	36,637
Indiana.....	13,347	665	9,706	4,017	1,109	..	510	3,138	286	32,778
Illinois.....	35,569	..	..	14,597	5,531	..	70	15,546	395	71,508
Michigan.....	34,773	..	10,619	10,236	1,949	..	1,623	3,763	684	63,647
Wisconsin.....	6,838	..	5,475	9,741	2,256	8,695	220	2,688	416	36,329
East North Central.....	98,277	665	31,687	44,055	13,329	8,695	3,096	38,840	2,255	240,899
Minnesota.....	14,365	..	4,907	10,187	1,182	..	129	16,020	428	47,218
Iowa.....	11,971	..	1,655	9,890	1,110	..	133	2,563	173	27,495
Missouri.....	7,443	..	6,235	8,103	1,937	4,030	323	2,918	335	31,324
North Dakota.....	3,848	..	1,080	866	63	612	10	656	59	7,194
South Dakota.....	4,778	..	1,945	1,321	164	..	17	739	160	9,124
Nebraska.....	6,290	..	3,091	1,228	..	..	174	596	165	11,544
Kansas.....	9,700	..	4,458	3,690	516	..	419	1,143	144	20,070
West North Central.....	58,395	..	23,371	35,285	4,972	4,642	1,205	24,635	1,464	153,969
Delaware.....	2,128	..	434	855	191	1,311	1,154	330	30	6,433
Maryland.....	6,641	..	2,750	1,784	674	..	121	5,198	138	17,306

Virginia.....	8,691	584	3,910	4,913	667	3,453	896	6,428	271	29,813
West Virginia.....	3,767	306	3,162	3,816	1,027	..	62	4,802	194	17,136
North Carolina.....	765	..	8,496	5,417	799	6,033	107	3,965	83	25,665
South Carolina.....	3,305	..	3,016	2,092	350	1,732	345	3,204	90	14,134
Georgia.....	6,514	333	5,733	3,892	194	..	406	2,549	108	19,729
Florida.....	5,179	..	8,817	4,886	..	..	537	1,922	188	21,529
South Atlantic.....	36,990	1,223	36,318	27,655	3,902	12,529	3,628	28,398	1,102	151,745
Kentucky.....	10,494	..	5,283	4,267	666	..	140	2,482	100	23,432
Tennessee.....	5,211	..	4,054	3,555	539	..	542	3,875	65	17,841
Alabama.....	8,136	..	1,864	2,493	..	..	421	2,509	87	15,510
Mississippi.....	4,606	..	2,146	336	128	1,864	80	2,037	..	11,197
East South Central.....	28,447	..	13,347	10,651	1,333	1,864	1,183	10,903	252	67,980
Arkansas.....	6,423	..	3,293	3,741	221	..	1,329	1,651	61	16,719
Louisiana.....	9,433	..	2,980	4,131	628	..	49	4,454	108	21,783
Oklahoma.....	2,448	..	4,015	3,014	160	362	134	9,162	116	19,411
Texas.....	24,847	1,490	9,951	11,468	1,562	..	..	10,824	186	60,328
West South Central.....	43,151	1,490	20,239	22,354	2,571	362	1,512	26,091	471	118,241
Montana.....	1,952	..	617	..	493	..	128	1,511	143	4,844
Idaho.....	2,233	..	1,381	146	11	..	111	300	174	4,356
Wyoming.....	1,498	..	690	526	24	..	41	131	117	3,027
Colorado.....	5,612	..	3,013	876	675	..	272	764	276	11,488
New Mexico.....	1,915	..	965	355	18	..	..	129	56	3,438
Arizona.....	4,616	..	467	452	121	..	75	215	43	5,989
Utah.....	5,195	..	1,304	650	248	..	204	392	96	8,089
Nevada.....	1,279	..	243	230	1	..	92	42	..	1,887
Mountain.....	24,300	..	8,680	3,235	1,591	..	923	3,484	905	43,118
Washington.....	16,618	..	3,711	6,508	580	..	..	1,977	94	29,488
Oregon.....	5,119	..	3,560	6,449	550	17	375	1,294	329	17,693
California.....	9,681	..	8,454	5,416	8,461	..	..	36,222	655	68,889
Pacific.....	31,418	..	15,725	18,373	9,591	17	375	39,493	1,078	116,070
United States.....	\$470,237	\$3,426	\$165,543	\$248,846	\$105,947	\$54,959	\$41,235	\$253,668	\$11,266	\$1,355,127

^a Does not include motor vehicle licenses.

¹ See footnote 1, Table 40.
² Does not include gasoline taxes.

TABLE 43: PERCENTAGE DISTRIBUTION OF STATE TAX REVENUE, FISCAL YEAR 1927
(Source: "Financial Statistics of States," Computed by National Industrial Conference Board)

States and Geographic Divisions	Property Taxes	Poll Taxes	Gasoline Taxes	Motor Vehicle Licenses	Inheritance Taxes	Income Taxes	Other Special Taxes	Business Licenses	Non-Business Licenses—Permits
Maine.....	41.20	0.03	13.98	17.93	5.57	..	1.05	19.43	0.81
New Hampshire.....	46.04	0.26	12.40	26.25	5.08	..	0.41	6.92	2.64
Vermont.....	40.04	0.49	10.67	32.68	7.56	..	0.43	6.59	1.54
Massachusetts.....	40.08	..	..	25.48	23.14	1.28	1.81	7.66	0.55
Rhode Island.....	45.99	..	8.66	22.90	6.82	..	1.10	14.22	0.31
Connecticut.....	20.87	..	10.98	24.25	10.04	..	0.86	31.50	1.50
New England.....	36.44	0.04	6.51	24.39	14.42	0.55	1.27	15.41	0.97
New York.....	20.64	..	..	12.66	13.26	14.17	13.57	25.26	0.44
New Jersey.....	58.41	..	..	19.24	17.47	..	0.99	3.47	0.42
Pennsylvania.....	32.26	..	8.69	23.77	16.37	..	2.04	15.34	1.53
Middle Atlantic.....	30.96	..	2.58	17.16	14.95	7.38	7.86	18.35	0.76
Ohio.....	21.70	..	16.07	14.91	6.78	..	1.84	37.41	1.29
Indiana.....	40.72	2.03	29.61	12.26	3.38	..	1.56	9.57	0.87
Illinois.....	49.46	..	..	20.41	7.74	..	0.10	21.74	0.55
Michigan.....	54.64	..	16.68	16.08	3.06	..	2.55	5.91	1.08
Wisconsin.....	18.82	..	15.07	26.81	6.21	23.94	0.61	7.40	1.14
East North Central.....	40.80	0.28	13.15	18.29	5.53	3.61	1.28	16.12	0.94
Minnesota.....	30.42	..	10.39	21.57	2.50	..	0.28	33.93	0.91
Iowa.....	43.54	..	6.02	35.97	4.04	..	0.48	9.32	0.63
Missouri.....	23.76	..	19.90	25.87	6.18	12.87	1.03	9.32	1.07
North Dakota.....	53.49	..	15.01	12.04	0.88	8.51	0.14	9.12	0.81
South Dakota.....	52.37	..	21.32	14.47	1.79	..	0.19	8.10	1.76
Nebraska.....	54.49	..	26.78	10.64	..	..	1.51	5.16	1.42
Kansas.....	48.33	..	22.21	18.39	2.57	..	2.09	5.69	0.72
West North Central.....	37.93	..	15.18	22.92	3.23	3.01	0.78	16.00	0.95
Delaware.....	33.09	..	6.75	13.29	2.96	20.37	17.94	5.14	0.46
Maryland.....	38.37	..	15.89	10.31	3.89	..	0.70	30.04	0.80

Virginia.....	29.15	1.96	13.11	16.48	2.24	11.58	3.01	21.56	0.91
West Virginia.....	21.98	1.79	18.45	22.27	5.99	..	0.36	28.03	1.13
North Carolina.....	2.98	..	33.10	21.11	3.11	23.51	0.42	15.45	0.32
South Carolina.....	23.38	..	21.34	14.80	2.48	12.25	2.44	22.67	0.64
Georgia.....	33.02	1.69	29.06	19.73	0.98	..	2.05	12.92	0.55
Florida.....	24.06	..	40.95	22.70	..	..	2.49	8.93	0.87
South Atlantic.....	24.38	0.81	23.93	18.22	2.57	8.26	2.39	18.71	0.73
Kentucky.....	44.78	..	22.55	18.21	2.84	..	0.60	10.59	0.43
Tennessee.....	29.21	..	22.72	19.92	3.02	..	3.04	21.72	0.37
Alabama.....	52.46	..	12.02	16.07	..	..	2.72	16.17	0.56
Mississippi.....	41.13	..	19.17	3.00	1.14	16.65	0.72	18.19	..
East South Central.....	41.85	..	19.63	15.67	1.96	2.74	1.74	16.04	0.37
Arkansas.....	38.41	..	19.70	22.37	1.32	..	7.95	9.88	0.37
Louisiana.....	43.30	..	13.68	18.97	2.88	..	0.23	20.45	0.49
Oklahoma.....	12.61	..	20.68	15.53	0.82	1.87	0.69	47.20	0.60
Texas.....	41.19	2.47	16.49	19.01	2.59	..	..	17.94	0.31
West South Central.....	36.49	1.26	17.12	18.90	2.17	0.31	1.28	22.07	0.40
Montana.....	40.29	..	12.74	..	10.19	..	2.63	31.19	2.96
Idaho.....	51.27	..	31.71	3.35	0.24	..	2.55	6.88	4.00
Wyoming.....	49.46	..	22.80	17.38	0.79	..	1.37	4.35	3.85
Colorado.....	48.85	..	24.23	7.63	5.87	..	2.37	6.65	2.40
New Mexico.....	55.71	..	28.08	10.32	0.54	..	..	3.74	1.61
Arizona.....	55.71	..	7.79	7.55	2.03	..	1.25	3.59	0.72
Utah.....	64.23	..	16.12	8.03	3.06	..	2.52	4.85	1.19
Nevada.....	67.77	..	12.89	12.18	0.06	..	4.85	2.25	..
Mountain.....	56.36	..	20.13	7.50	3.69	..	2.14	8.08	2.10
Washington.....	56.35	..	12.59	22.07	1.97	..	..	6.70	0.32
Oregon.....	28.93	..	20.12	36.45	3.11	0.09	2.12	7.32	1.86
California.....	14.06	..	12.27	7.86	12.28	..	..	52.58	0.95
Pacific.....	27.07	..	13.55	15.83	8.26	0.01	0.32	34.03	0.93
United States.....	34.70	0.25	12.22	18.36	7.82	4.06	3.04	18.72	0.83

¹ See footnote 1, Table 40.

² Does not include gasoline taxes.

³ Does not include motor vehicle licenses.

ended in 1922, general property taxes amounted to 40.6% of all state tax revenues; in the fiscal year ended in 1927, only 27.3% of state tax revenues were attributed to this tax. Special property taxes in the fiscal year ended in 1922 accounted for 9.4% of all state tax receipts, while in the fiscal year ended in 1927 only 7.4% of state tax receipts were derived from this source.

As shown in Tables 41 and 43, Arizona exceeded all other states in the proportion of property tax collections to total state tax collections in the fiscal years ended in 1926 and 1927. In the former year, 79%, and in the latter, 77%, of state taxes in this state were derived from taxes on property. North Carolina had the lowest proportion of property taxes to total state tax collections in both years, the proportions being 3.5% for the fiscal year ended in 1926 and 3.0% for the following year. Only nine states¹ and one geographic division, the Pacific, show a larger proportion of property taxes for the fiscal year ended in 1927 than in the preceding year. The Pacific division had the lowest proportion of property taxes to total state taxes in the fiscal year ended in 1926, and the South Atlantic division in the following year. In both years the Mountain division had a higher proportion than any other regional group.

While general property taxes ordinarily produce a much larger amount of state revenue than do special property taxes, in two states, Pennsylvania and North Carolina, no general property taxes whatever were collected for the state government in the fiscal year ended in 1927, and in six other states² special property tax receipts exceeded general property tax receipts. Special property taxes are particularly important in the state fiscal systems of the three Middle Atlantic states. In the fiscal year ended in 1927 the Middle Atlantic division accounted for more than one-half of all state special property tax collections in the United States.

Licenses and permits, a group which includes gasoline taxes and motor vehicle license receipts, amounted to \$305 millions in the fiscal year ended in 1922, or 35.6% of state

¹ Illinois, Minnesota, Iowa, Missouri, South Dakota, Tennessee, Arkansas, Washington and California.

² Vermont, Rhode Island, Connecticut, Ohio, Delaware, and California.

tax revenue for that year. In the fiscal year ended in 1927, collections on account of licenses and permits amounted to \$679 millions, or slightly more than 50% of state tax revenues from all sources. This increase of 123% in volume of collections is in a considerable measure attributable to gasoline tax laws enacted during the five-year period and to increased receipts from motor vehicle licenses. In addition, it should be noted that all of the states that had gasoline tax statutes on their books in 1922 increased the rate of tax at least once during the five-year period. Business licenses, exclusive of gasoline taxes, likewise showed a considerable increase during this period.

At the close of the fiscal year 1927, all but four states had gasoline tax statutes in force; the exceptions were Massachusetts, New York, New Jersey and Illinois. Since then these four states have enacted legislation providing for such taxes. State receipts from gasoline taxes amounted to \$166 millions in the fiscal year ended in 1927 and to \$137 millions in the preceding year. The proportion of total state tax revenue obtained from this source was 12.2% for the fiscal year ended in 1927 and 10.8% for the preceding year. There has been a definite trend towards higher gasoline tax rates in recent years and, now that every state has enacted a gasoline tax law, the indications are that increasing amounts of revenue will be derived from this source. To what extent state revenues from this source will be augmented will depend in part upon changes in the laws providing for local shares in the receipts. As the rate is increased, a provision is frequently inserted in the statute providing that certain local governments shall share in the enlarged receipts.

Motor vehicle license fees received by the state governments during the fiscal year ended in 1927 amounted to \$249 millions or 18.4% of total state tax receipts. This amount does not include that portion of the receipts which were retained by, or reverted to, the local governments. State receipts from this source in the preceding year amounted to \$234 millions, or 18.5% of total state tax receipts. In the fiscal year ended in 1927, Oregon's receipts from motor vehicle license fees amounted to 36.4% of her state tax revenues, a larger proportion than in any other

state; in the preceding year Iowa's motor vehicle license receipts were equal to 36.3% of her state tax receipts for that year, a larger proportion than in any other state. The state government of Montana received no income from this source in either year, as motor vehicle license receipts are a source of local revenue in that state. In both 1926 and 1927, for which data are presented in Tables 40 to 43, the New England division obtained a larger proportion of state tax revenue from this source than any other geographic division, while the Mountain division had the lowest proportion in both years.

Collections by state governments on account of general business licenses in the fiscal year ended in 1927 amounted to \$254 millions, or 18.7% of state tax revenues. In the preceding year, state receipts from this source were \$236 millions, or 18.6% of total state tax revenues. In both years state receipts from general business licenses formed a larger proportion of total state tax receipts in California than in any other state. The proportion was 57.9% for 1926 and 52.6% for 1927.

Non-business licenses exclusive of motor vehicle licenses are unimportant as producers of state revenue. In both 1926 and 1927 less than one per cent of total state tax revenue was derived from this source. In no state did the receipts from non-business licenses amount to 5% of the state tax revenues.

Inheritance tax collections received by the various state governments in the fiscal year ended in 1927 amounted to \$106 millions, or 7.8% of state revenues from taxes, as compared with \$90.6 millions or 7.2% in the preceding year. All the states except Nebraska, Florida and Alabama received income from this source in the fiscal years ended in 1926 and 1927. This tax is locally administered in Nebraska and the entire receipts accrue to the county governments, while Florida and Alabama are the only states which do not levy inheritance taxes. In the fiscal years ended in 1926 and in 1927, Massachusetts obtained a larger percentage of her state tax revenues from the inheritance tax than did any other state, and in both years the Middle Atlantic division showed a larger percentage of revenue from this source than any other regional group.

Income taxes accounted for \$55.0 millions of state tax

revenue in the fiscal year ended in 1927 and for \$38.6 millions in the preceding fiscal year.¹ The proportion of total state taxes obtained from this source increased from 3.1% in 1926 to 4.1% in 1927. In North Carolina, income tax collections in the fiscal year ended in 1926 amounted to 25.6% of state tax revenue and in the following year to 23.5%. Income tax collections accruing to the state government in Wisconsin amounted to 23.9% of the state tax receipts for the fiscal year ended in 1927 as compared with 19.7% in the preceding year. During the fiscal year ended in 1927, the state government of New York received more than \$26 millions¹ on account of income tax collections, an amount equal to almost one-half of all income tax receipts of state governments.

Other special taxes accounted for \$43.8 millions of state revenues in the fiscal year ended in 1926 and to \$41.2 millions in the following fiscal year. Poll tax collections received by state governments amounted to less than \$3.5 millions in the fiscal year ended in 1927, and in only five states did the collections from this source amount to more than one per cent of the state tax revenue.

Sources of Local Tax Revenue

Collections on account of property taxes comprised about 93% of all local tax collections in each of the years for which data are presented in Tables 44 and 45. While from time to time legislation has been enacted which provides for local shares in state taxes levied on bases other than property, receipts from such sources have not as yet greatly altered the distribution of local tax revenues in the United States as a whole. In certain states, however, such legislation has had the effect of reducing somewhat the proportion of local property tax collections to total local tax collections, but the amounts involved have been relatively small compared with property tax revenues.

Local property tax receipts, consisting almost entirely of ad valorem taxes, amounted to \$4,298 millions in the fiscal year ended in 1928, to \$4,061 millions in the fiscal year ended in 1927 and to \$3,841 millions in the preceding year. The predominance of property taxes in local tax systems is further

¹ See footnote 1, Table 40.

TABLE 44: SOURCES OF LOCAL TAX REVENUE, FISCAL YEARS 1926, 1927 AND 1928¹

(Computed by National Industrial Conference Board)

(\$Amounts in thousands)

States and Geographic Divisions	1926					1927					1928				
	Property Taxes	Other Taxes	Licenses and Permits	Total Taxes	Property Taxes	Other Taxes	Licenses and Permits	Total Taxes	Property Taxes	Other Taxes	Licenses and Permits	Total Taxes	Property Taxes	Other Taxes	Total Taxes
Maine.....	\$21,545	\$651	\$180	\$22,376	\$22,180	\$645	\$190	\$23,015	\$22,782	\$673	\$203	\$23,658			
New Hampshire.....	15,019	1,443	914	17,376	15,410	1,629	761	17,800	15,784	1,650	828	18,262			
Vermont.....	8,804	610	44	9,458	9,321	601	44	9,966	9,639	624	44	10,307			
Massachusetts.....	189,439	37,584	978	228,001	193,523	36,972	964	231,459	193,984	39,021	964	233,969			
Rhode Island.....	20,722	1,866	186	21,066	21,926	1,623	192	22,281	23,283	1,666	226	23,675			
Connecticut.....	56,646	1,298	822	58,766	59,291	1,252	942	61,485	62,269	1,521	961	64,751			
New England.....	312,175	41,746	3,124	357,045	321,651	41,262	3,093	366,006	327,741	43,655	3,226	374,622			
New York.....	567,187	53,900	10,832	631,919	618,119	54,149	11,696	683,964	672,808	60,108	12,689	745,605			
New Jersey.....	185,970	612	6,783	193,365	204,166	623	6,367	211,156	219,304	628	6,401	226,333			
Pennsylvania.....	298,400	4,401	6,421	309,222	306,401	4,432	7,877	318,610	314,419	4,460	9,137	328,016			
Middle Atlantic.....	1,051,557	58,913	24,036	1,134,506	1,128,586	59,204	25,940	1,213,730	1,206,531	65,196	28,227	1,299,954			
Ohio.....	252,700	1,984	13,637	268,321	264,601	3,005	15,594	283,200	277,348	2,522	17,652	297,522			
Indiana.....	114,327	665	2,781	117,773	117,163	680	2,883	120,726	120,998	740	2,831	124,569			
Illinois.....	250,471	216	11,090	261,777	261,316	188	11,387	272,891	295,686	263	11,742	307,691			
Michigan.....	173,860	1,542	8,565	183,967	202,203	1,444	10,285	213,932	217,658	1,432	13,002	232,092			
Wisconsin.....	102,820	7,494	1,811	112,125	108,472	10,003	2,119	120,594	112,503	9,770	2,114	124,387			
East North Central.....	894,178	11,901	37,884	943,963	953,755	15,320	42,268	1,011,343	1,024,193	14,727	47,341	1,086,261			
Minnesota.....	102,743	515	1,450	104,708	104,252	540	1,464	106,256	107,166	471	1,488	109,125			
Iowa.....	88,621	738	4,250	93,609	91,167	760	5,113	97,040	91,687	745	6,553	98,985			
Missouri.....	91,063	264	5,270	96,597	95,155	264	5,471	100,890	96,535	265	5,688	102,488			
North Dakota.....	24,526	466	716	25,708	24,227	487	714	25,428	26,062	468	805	27,335			
South Dakota.....	28,342	386	1,855	30,583	27,402	384	1,884	29,670	28,656	401	2,096	31,153			
Nebraska.....	46,635	570	3,260	50,465	47,318	568	3,302	51,188	52,156	555	3,462	56,153			
Kansas.....	69,856	384	3,932	74,172	71,926	386	4,381	76,693	75,512	388	3,958	79,858			
West North Central.....	451,786	3,323	20,733	475,842	461,447	3,389	22,329	487,165	477,754	3,293	24,050	505,097			
Delaware.....	4,658	39	143	4,840	4,661	38	133	4,832	4,920	44	132	5,096			
Maryland.....	44,309	..	2,479	46,788	46,175	..	3,308	49,483	48,700	..	3,305	52,005			

District of Columbia...	17,940	5	3,839	21,784	20,700	4	4,411	25,115	22,917	4	4,386	27,307
Virginia.....	35,630	481	4,604	40,715	37,207	520	4,834	42,561	38,309	504	5,570	44,383
West Virginia.....	45,775	349	370	46,494	46,754	352	377	47,483	48,360	357	380	49,097
North Carolina.....	54,996	830	1,213	57,039	56,834	815	1,250	58,899	61,622	815	1,295	63,732
South Carolina.....	22,153	729	3,036	25,918	22,588	688	3,283	26,559	23,115	669	3,471	27,255
Georgia.....	32,067	549	4,173	36,789	32,732	555	4,624	37,911	34,404	561	4,844	39,809
Florida.....	60,264	154	6,919	67,337	73,504	159	5,432	79,095	72,985	165	5,052	78,202
South Atlantic.....	317,792	3,136	26,776	347,704	341,155	3,131	27,652	371,938	355,332	3,119	28,435	386,886
Kentucky.....	37,615	627	1,857	40,099	39,755	639	1,713	42,107	41,884	652	1,848	44,384
Tennessee.....	36,358	729	2,443	39,530	38,324	734	2,446	41,504	40,523	739	2,525	43,787
Alabama.....	21,277	281	5,855	27,413	22,795	205	6,545	29,545	23,793	393	7,131	31,317
Mississippi.....	31,982	1,560	4,480	38,022	35,775	1,558	5,433	42,766	38,317	1,558	6,354	46,229
East South Central.....	127,232	3,197	14,635	145,064	136,649	3,136	16,137	155,922	144,517	3,342	17,858	165,717
Arkansas.....	17,601	704	734	19,039	20,272	651	746	21,669	20,722	594	764	22,080
Louisiana.....	43,347	381	1,863	45,591	44,085	407	1,916	46,408	44,505	697	2,001	47,203
Oklahoma.....	58,308	114	7,162	65,584	58,305	116	7,748	66,169	60,169	118	8,428	68,715
Texas.....	97,039	508	4,942	102,489	106,361	450	5,174	111,985	113,137	498	8,402	122,037
West South Central.....	216,295	1,707	14,701	232,703	229,023	1,624	15,584	246,231	238,533	1,907	19,595	260,035
Montana.....	21,798	715	1,833	24,346	21,586	258	1,742	23,586	22,663	216	1,545	24,424
Idaho.....	17,151	37	2,040	19,228	17,170	36	2,162	19,368	17,190	38	2,295	19,523
Wyoming.....	7,899	86	436	8,421	8,358	88	445	8,891	8,695	90	456	9,241
Colorado.....	39,464	..	1,934	41,398	40,536	..	1,974	42,510	41,932	..	2,070	44,002
New Mexico.....	7,216	..	293	7,509	6,998	..	294	7,292	7,085	..	323	7,408
Arizona.....	12,686	276	757	13,719	13,320	285	1,044	14,649	14,057	294	1,042	15,393
Utah.....	13,877	..	393	14,720	14,457	..	389	14,846	14,331	..	392	14,723
Nevada.....	4,154	64	471	4,689	4,229	64	507	4,800	4,293	64	556	4,913
Mountain.....	124,245	1,178	8,157	133,580	126,654	731	8,557	135,942	130,246	702	8,679	139,627
Washington.....	56,756	..	697	57,453	57,809	..	713	58,522	61,071	..	733	61,804
Oregon.....	39,814	..	498	42,312	42,579	..	484	43,063	44,358	..	485	44,843
California.....	248,751	..	17,501	266,252	261,558	..	16,043	277,601	287,567	..	17,432	304,999
Pacific.....	345,321	..	18,696	364,017	361,946	..	17,240	379,186	392,996	..	18,650	411,646
United States.....	\$3,840,581	\$125,101	\$168,742	\$4,134,424	\$4,060,866	\$127,797	\$178,800	\$4,367,463	\$4,297,843	\$135,941	\$196,061	\$4,629,845

¹ For sources see Appendix B, p. 143, of this volume.

TABLE 45: PERCENTAGE DISTRIBUTION OF LOCAL TAX REVENUE, FISCAL YEARS 1926, 1927 AND 1928
(Computed by National Industrial Conference Board)

States and Geographic Divisions	1926			1927			1928		
	Property Taxes	Other Taxes	Licenses and Permits	Property Taxes	Other Taxes	Licenses and Permits	Property Taxes	Other Taxes	Licenses and Permits
Maine.....	96.29	2.91	0.80	96.37	2.80	0.83	96.30	2.84	0.86
New Hampshire.....	86.44	8.30	5.26	86.57	9.15	4.28	86.43	9.04	4.53
Vermont.....	93.09	6.45	0.46	93.53	6.03	0.44	93.52	6.05	0.43
Massachusetts.....	83.09	16.48	0.46	83.61	15.97	0.42	82.91	16.68	0.41
Rhode Island.....	98.36	0.76	0.88	98.41	0.73	0.86	98.34	0.70	0.96
Connecticut.....	96.39	2.21	1.40	96.43	2.04	1.53	96.17	2.35	1.48
New England.....	87.43	11.69	0.88	87.88	11.27	0.85	87.49	11.65	0.86
New York.....	89.76	8.53	1.71	90.37	7.92	1.71	90.24	8.06	1.70
New Jersey.....	96.17	0.32	3.51	96.69	0.29	3.02	96.89	0.28	2.83
Pennsylvania.....	96.50	1.42	2.08	96.14	1.39	2.47	95.85	1.36	2.79
Middle Atlantic.....	92.69	5.19	2.12	92.98	4.88	2.14	92.81	5.02	2.17
Ohio.....	94.18	0.74	5.08	93.43	1.06	5.51	93.22	0.85	5.93
Indiana.....	97.07	0.57	2.36	97.05	0.56	2.39	97.13	0.60	2.27
Illinois.....	95.68	0.08	4.24	95.76	0.07	4.17	96.10	0.08	3.82
Michigan.....	94.50	0.84	4.66	94.52	0.67	4.81	93.78	0.62	5.60
Wisconsin.....	91.70	6.68	1.62	89.95	8.29	1.76	90.45	7.85	1.70
East North Central.....	94.73	1.26	4.01	94.31	1.51	4.18	94.29	1.35	4.36
Minnesota.....	98.12	0.49	1.39	98.11	0.51	1.38	98.21	0.43	1.36
Iowa.....	94.67	0.79	4.54	93.95	0.78	5.27	92.63	0.75	6.62
Missouri.....	94.27	0.27	5.46	94.32	0.26	5.42	94.19	0.26	5.55
North Dakota.....	95.40	1.81	2.79	95.28	1.91	2.81	95.34	1.71	2.95
South Dakota.....	92.67	1.26	6.07	92.36	1.29	6.35	91.98	1.29	6.73
Nebraska.....	92.41	1.13	6.46	92.44	1.11	6.45	92.85	0.99	6.16
Kansas.....	94.18	0.52	5.30	93.79	0.50	5.71	94.56	0.48	4.96
West North Central.....	94.94	0.70	4.36	94.72	0.70	4.58	94.59	0.65	4.76
Delaware.....	96.24	0.81	2.95	96.46	0.79	2.75	96.55	0.86	2.59
Maryland.....	94.70	..	5.30	93.31	..	6.69	93.64	..	6.36

District of Columbia.....	82.36	0.02	17.62	82.42	0.02	17.56	83.92	0.02	16.06
Virginia.....	87.51	1.18	11.31	87.42	1.22	11.36	86.31	1.14	12.55
West Virginia.....	98.45	0.75	0.80	98.47	0.74	0.79	98.50	0.73	0.77
North Carolina.....	96.42	1.45	2.13	96.50	1.38	2.12	96.69	1.28	2.03
South Carolina.....	85.47	2.81	11.72	85.05	2.59	12.36	84.81	2.45	12.74
Georgia.....	87.17	1.49	11.34	86.54	1.46	12.20	86.42	1.41	12.17
Florida.....	89.50	0.23	10.27	92.93	0.20	6.87	93.33	0.21	6.46
South Atlantic.....	91.40	0.90	7.70	91.72	0.84	7.44	91.84	0.81	7.35
Kentucky.....	93.81	1.56	4.63	94.41	1.52	4.07	94.37	1.47	4.16
Tennessee.....	91.98	1.84	6.18	92.34	1.77	5.89	92.54	1.69	5.77
Alabama.....	77.62	1.02	21.36	77.15	0.70	22.15	75.97	1.26	22.77
Mississippi.....	84.12	4.10	11.78	83.65	3.64	12.71	82.89	3.37	13.74
East South Central.....	87.71	2.20	10.09	87.64	2.01	10.35	87.21	2.02	10.77
Arkansas.....	92.45	3.70	3.85	93.55	3.01	3.44	93.85	2.69	3.46
Louisiana.....	95.08	0.83	4.09	94.99	0.88	4.13	94.28	1.48	4.24
Oklahoma.....	88.91	0.17	10.92	88.11	0.18	11.71	87.56	0.17	12.27
Texas.....	94.68	0.50	4.82	94.98	0.40	4.62	92.71	0.41	6.88
West South Central.....	92.95	0.73	6.32	93.01	0.66	6.33	91.73	0.73	7.54
Montana.....	89.53	2.94	7.53	91.52	1.09	7.39	92.79	0.88	6.33
Idaho.....	89.20	0.19	10.61	88.65	0.19	11.16	88.05	0.19	11.76
Wyoming.....	93.80	1.02	5.18	94.01	0.99	5.00	94.09	0.97	4.94
Colorado.....	95.33	..	4.67	95.36	..	4.64	95.30	..	4.70
New Mexico.....	96.10	..	3.90	95.97	..	4.03	95.64	..	4.36
Arizona.....	92.47	2.01	5.52	90.93	1.94	7.13	91.32	1.91	6.77
Utah.....	97.25	2.75	2.75	97.38	..	2.62	97.34	..	2.66
Nevada.....	88.59	1.37	10.04	88.11	1.33	10.56	87.38	1.30	11.32
Mountain.....	93.01	0.88	6.11	93.17	0.54	6.29	93.28	0.50	6.22
Washington.....	98.79	..	1.21	98.78	..	1.22	98.81	..	1.19
Oregon.....	98.76	..	1.24	98.88	..	1.12	98.92	..	1.08
California.....	93.43	..	6.57	94.22	..	5.78	94.28	..	5.72
Pacific.....	94.86	..	5.14	95.45	..	4.55	95.47	..	4.53
United States.....	92.89	3.03	4.08	92.98	2.93	4.09	92.83	2.94	4.23

illustrated by the fact that local property tax collections for the fiscal year ended in 1928 were greater in amount than local tax receipts from all sources in the fiscal year ended in 1926.

A Pacific state had the highest proportion of local property taxes to total local tax collections for each of the years for which data are presented in Tables 44 and 45. Washington had the highest proportion in the fiscal year ended in 1926, and in the two following years Oregon had the highest proportion. The highest proportion in each year was approximately 99%. Alabama, with a proportion varying between 76% and 78%, had the lowest proportion of local property tax collections to total local tax collections in each of the three years. In eleven states and in the District of Columbia less than 90% of total local taxes were obtained from taxes on property in the fiscal year ended in 1927, while in the following year the number of states was reduced to ten. The proportion of property taxes to total local taxes, by states, is graphically presented in Chart 13.

Local receipts from licenses and permits are gradually becoming more important, although they accounted for only 4.2% of local tax revenues in the fiscal year ended in 1928. Receipts from this source amounted to \$196 millions for the fiscal year ended in 1928 as compared with \$103 millions for the fiscal year ended in 1922. This increase is largely attributable to the gasoline tax statutes enacted during this period; a number of these provide for local shares in gasoline tax receipts. Also, motor vehicle license receipts have increased greatly in amount, and have tended to enlarge local receipts from licenses and permits in those states in which the localities share in receipts from this source.

Taxes levied on bases other than property are not important sources of local tax revenue except in a few states. In the fiscal year ended in 1928, such taxes produced less than 3% of all local tax receipts. Local receipts from income taxes are fairly large in Massachusetts, New York and Wisconsin, and in several states local shares in various corporation taxes are also quite large. In other states the localities share in such taxes as the inheritance tax and the severance tax. In a considerable number of states the amount shown under

CHART 13: PROPORTION OF LOCAL PROPERTY TAXES TO TOTAL LOCAL TAXES, FISCAL
YEAR 1927

(National Industrial Conference Board)

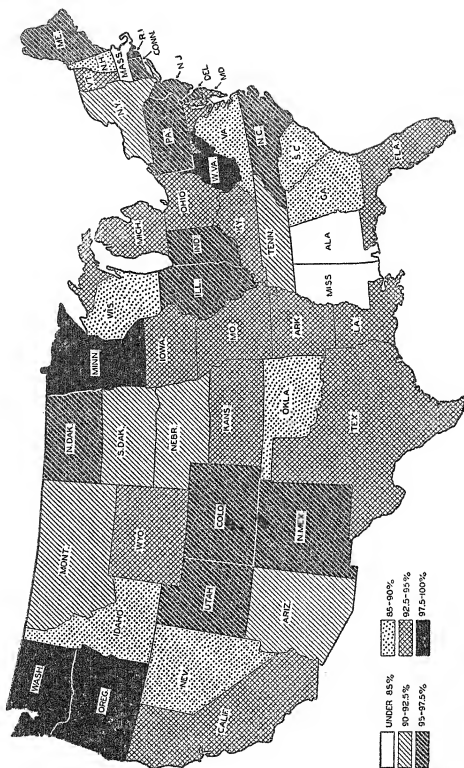


TABLE 46: SOURCES OF STATE AND LOCAL TAX REVENUE, FISCAL YEARS 1926 AND 1927
(Computed by National Industrial Conference Board)
(Amounts in thousands)

States and Geographic Divisions	1926				1927			
	Property Taxes	Other Taxes	Licenses and Permits	Total Taxes	Property Taxes	Other Taxes	Licenses and Permits	Total Taxes
Maine.....	\$27,378	\$1,513	\$6,245	\$35,136	\$28,088	\$1,599	\$7,667	\$37,354
New Hampshire.....	17,768	1,817	3,635	23,220	18,271	1,986	3,756	24,013
Vermont.....	11,072	886	2,619	14,577	11,619	1,088	2,998	15,705
Massachusetts.....	207,493	45,365	17,475	270,333	212,140	49,155	16,611	277,906
Rhode Island.....	24,646	592	3,764	29,002	25,994	863	4,270	31,127
Connecticut.....	62,160	4,072	16,309	82,541	64,689	4,071	18,591	87,351
New England.....	330,517	54,245	50,047	434,809	360,801	58,762	53,893	473,456
New York.....	610,008	116,960	71,552	798,520	656,371	130,122	82,795	869,288
New Jersey.....	221,470	8,115	20,291	249,876	241,931	12,558	21,320	275,809
Pennsylvania.....	331,904	21,193	55,948	409,045	340,393	23,893	60,002	424,288
Middle Atlantic.....	1,163,382	146,268	147,791	1,457,441	1,238,695	166,573	164,117	1,569,385
Ohio.....	260,514	5,050	37,410	302,974	272,551	6,162	41,124	319,837
Indiana.....	129,097	2,516	18,376	149,989	130,510	2,964	20,030	153,504
Illinois.....	282,104	7,090	40,088	329,282	296,685	5,789	41,925	344,399
Michigan.....	209,110	5,306	32,848	247,264	226,976	5,016	35,587	277,579
Wisconsin.....	111,084	15,956	16,815	143,855	115,310	21,174	20,439	156,923
East North Central.....	991,909	35,918	145,557	1,173,384	1,052,032	41,105	139,105	1,232,242
Minnesota.....	115,005	1,543	30,086	146,634	118,617	1,851	33,006	153,474
Iowa.....	100,154	1,997	18,451	120,602	103,138	2,003	19,394	124,535
Missouri.....	97,804	6,824	21,924	126,552	102,598	6,554	23,062	132,214
North Dakota.....	29,063	1,070	3,310	33,443	28,075	1,172	3,375	32,622
South Dakota.....	32,967	559	6,150	39,676	32,180	565	6,049	38,794
Nebraska.....	53,753	600	7,989	62,342	53,608	742	8,382	62,732
Kansas.....	78,575	952	12,389	91,916	81,626	1,321	13,816	96,763
West North Central.....	507,521	13,545	100,299	621,165	519,842	14,208	107,084	641,134
Delaware.....	6,856	2,719	1,624	11,199	6,789	2,694	1,782	11,265
Maryland.....	50,495	1,028	11,154	62,677	52,816	795	13,178	66,789

District of Columbia.....	17,940	5	3,339	21,784	20,700	4	4,411	25,115
Virginia.....	43,403	4,482	18,054	65,939	45,898	6,120	20,356	72,374
West Virginia.....	49,733	1,518	10,775	62,026	50,521	1,747	12,351	64,619
North Carolina.....	55,817	7,961	16,920	80,698	57,599	7,754	19,211	84,564
South Carolina.....	55,611	2,815	11,305	39,731	25,893	3,115	11,685	40,693
Georgia.....	38,825	1,442	13,967	54,234	39,246	1,488	16,906	57,640
Florida.....	67,668	1,821	21,873	91,362	78,683	696	21,245	100,624
South Atlantic.....	356,348	23,791	109,511	489,650	378,145	24,413	121,125	523,683
Kentucky.....	47,880	1,449	11,553	60,882	50,249	1,445	13,845	65,539
Tennessee.....	40,980	1,904	13,462	56,346	43,535	1,815	13,995	59,345
Alabama.....	28,931	746	10,603	40,280	30,931	626	13,498	45,055
Mississippi.....	37,967	3,703	8,543	50,013	40,381	3,630	9,952	53,963
East South Central.....	155,758	7,802	43,961	207,521	165,096	7,516	51,200	223,902
Arkansas.....	23,143	2,363	9,675	35,181	26,695	2,201	9,492	38,388
Louisiana.....	53,389	1,043	11,879	66,311	53,518	1,084	13,589	68,191
Oklahoma.....	62,797	921	20,908	84,626	60,753	772	24,055	85,580
Texas.....	125,189	3,389	29,703	158,281	131,208	3,502	37,603	172,313
West South Central.....	264,518	7,716	72,165	344,399	272,174	7,559	84,739	364,472
Montana.....	23,791	1,342	3,874	29,007	23,538	879	4,013	28,430
Idaho.....	19,594	84	3,721	23,399	19,403	158	4,163	23,724
Wyoming.....	9,709	170	1,688	11,567	9,856	153	1,909	11,918
Colorado.....	45,307	963	5,809	52,079	46,148	947	6,903	53,998
New Mexico.....	8,825	23	1,475	10,323	8,913	18	1,799	10,730
Arizona.....	17,523	452	1,861	19,336	17,936	481	2,221	20,638
Utah.....	18,901	511	2,566	21,978	19,652	452	2,831	22,935
Nevada.....	5,454	148	940	6,542	5,508	157	1,022	6,687
Mountain.....	149,104	3,693	21,934	174,731	150,954	3,245	24,861	179,060
Washington.....	69,074	547	11,791	81,412	74,427	580	13,003	88,010
Oregon.....	45,281	874	11,234	57,389	47,698	942	12,116	60,756
California.....	258,308	7,420	71,101	336,829	271,239	8,461	66,790	346,490
Pacific.....	372,663	8,841	94,126	475,630	393,364	9,983	91,909	495,256
United States.....	\$4,311,520	\$301,819	\$785,371	\$5,398,710	\$4,531,103	\$333,364	\$858,123	\$5,722,590

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TABLE 47: PERCENTAGE DISTRIBUTION OF STATE AND LOCAL TAX REVENUE, FISCAL YEARS 1926 AND 1927

(Computed by National Industrial Conference Board)

States and Geographic Divisions	1926			1927		
	Property Taxes	Other Taxes	Licenses and Permits	Property Taxes	Other Taxes	Licenses and Permits
Maine.....	77.92	4.31	17.77	75.19	4.27	20.54
New Hampshire.....	76.52	7.33	15.65	76.09	8.27	15.64
Vermont.....	75.95	6.08	17.97	73.98	6.93	19.09
Massachusetts.....	76.76	16.78	6.46	76.33	17.69	5.98
Rhode Island.....	84.98	2.04	12.98	83.51	2.77	13.72
Connecticut.....	75.31	4.93	19.76	74.06	4.66	21.28
New England.....	77.07	11.93	11.00	76.21	12.41	11.38
New York.....	76.39	14.65	8.96	75.51	14.97	9.52
New Jersey.....	88.63	3.25	8.12	87.72	4.55	7.73
Pennsylvania.....	81.14	5.18	13.68	80.23	5.63	14.14
Middle Atlantic.....	79.82	10.04	10.14	78.93	10.61	10.46
Ohio.....	85.98	1.67	12.35	85.21	1.93	12.86
Indiana.....	86.07	1.68	12.23	85.02	1.93	13.05
Illinois.....	85.67	2.15	12.18	86.15	1.68	12.17
Michigan.....	84.57	2.15	13.28	85.37	1.81	12.82
Wisconsin.....	77.22	11.09	11.69	73.48	13.49	13.03
East North Central.....	84.54	3.06	12.40	84.01	3.28	12.71
Minnesota.....	78.43	1.05	20.52	77.29	1.21	21.50
Iowa.....	83.04	1.66	15.30	82.82	1.61	15.57
Missouri.....	77.28	5.39	17.33	77.60	4.96	17.44
North Dakota.....	86.90	3.20	9.90	86.06	3.59	10.35
South Dakota.....	83.09	1.41	15.50	82.95	1.46	15.59
Nebraska.....	86.22	0.96	12.82	85.46	1.18	13.36
Kansas.....	85.48	1.04	13.48	84.36	1.36	14.28
West North Central.....	81.67	2.17	16.16	81.08	2.22	16.70
Delaware.....	61.22	24.28	14.50	60.27	23.91	15.82
Maryland.....	80.56	1.64	17.80	79.08	1.19	19.73
District of Columbia.....	82.36	0.02	17.62	82.42	0.02	17.56
Virginia.....	65.82	6.80	27.38	63.42	8.45	28.13
West Virginia.....	80.18	2.45	17.37	78.18	2.71	19.11
North Carolina.....	69.17	9.86	20.97	68.11	9.17	22.72
South Carolina.....	64.46	7.09	28.45	63.63	7.65	28.72
Georgia.....	71.59	2.66	25.75	68.09	2.58	29.33
Florida.....	74.07	1.99	23.94	78.20	0.69	21.11
South Atlantic.....	72.78	4.86	22.36	72.21	4.66	23.13
Kentucky.....	78.64	2.38	18.98	76.67	2.20	21.13
Tennessee.....	72.73	3.38	23.89	73.36	3.06	23.58
Alabama.....	71.83	1.85	26.32	68.65	1.39	29.96
Mississippi.....	75.92	7.40	16.68	74.83	6.73	18.44
East South Central.....	75.06	3.76	21.18	73.73	3.36	22.91
Arkansas.....	65.78	6.72	27.50	69.54	5.73	24.73
Louisiana.....	80.51	1.57	17.92	78.48	1.59	19.93
Oklahoma.....	74.20	1.09	24.71	70.99	0.90	28.11
Texas.....	79.09	2.14	18.77	76.15	2.03	21.82
West South Central.....	76.81	2.24	20.95	74.68	2.07	23.25
Montana.....	82.02	4.63	13.35	82.79	3.09	14.12
Idaho.....	83.74	0.36	15.30	81.79	0.66	17.55
Wyoming.....	83.94	1.47	14.59	82.70	1.28	16.02
Colorado.....	87.00	1.85	11.15	85.46	1.75	12.79
New Mexico.....	85.49	0.22	14.29	83.07	0.17	16.76
Arizona.....	88.34	2.28	9.38	86.91	2.33	10.76
Utah.....	86.00	2.32	11.68	85.69	1.97	12.34
Nevada.....	83.37	2.26	14.37	82.37	2.35	15.28
Mountain.....	85.33	2.12	12.55	84.30	1.81	13.89
Washington.....	84.85	0.67	14.48	84.57	0.66	14.77
Oregon.....	78.90	1.52	19.58	78.51	1.55	19.94
California.....	76.69	2.20	21.11	78.28	2.44	19.28
Pacific.....	78.35	1.86	19.79	79.43	2.01	18.56
United States.....	79.86	5.59	14.55	79.18	5.83	14.99

"Other taxes" in Table 44 consists of poll tax collections exclusively.

Combined State and Local Tax Revenue

Data on the sources of state and local tax collections for the fiscal years ended in 1926 and 1927 are shown in combined form in Tables 46 and 47. Property taxes collected by all state and local governments for the fiscal year ended in 1927 amounted to \$4,531 millions, or 79% of all state and local taxes. Although state and local property tax collections in the fiscal year ended in 1927 exceeded collections in the preceding year by \$220 millions, the proportion of property taxes to total tax collections showed a slight decline. Table 45 indicates there was a slight increase in the fiscal year ended in 1927 in the proportion of local property taxes to total local tax revenues. This slight increase in the proportion of local property tax collections to total local tax collections tends to minimize the effect of the considerable decline in state property tax collections, when the data are presented in combined form.

In the fiscal years ended in 1926 and 1927, New Jersey had a higher proportion of property tax collections to combined state and local tax collections from all sources than any other state. The proportion for this state was 88.6% for the fiscal year ended in 1926 and 87.7% for the following year. In both years Delaware had a lower proportion than any other state. Although the 1927 proportion of property tax collections to total state and local tax collections for the United States as a whole was less than one per cent lower than the 1926 proportion, the downward tendency was evident in three-fourths of the states¹ and in all geographic divisions except the Pacific.

Licenses and permits have increased in importance as producers of state and local revenue, but the receipts from these sources in the fiscal year ended in 1927 amounted to only 15% of combined state and local tax revenues. However, receipts from licenses and permits for the fiscal year ended

¹ In the following states the 1927 ratio was higher than the 1926 ratio: Illinois, Michigan, Missouri, Florida, Tennessee, Arkansas, Montana, and California. The 1927 ratio was also higher for the District of Columbia.

110 COST OF GOVERNMENT IN UNITED STATES

TABLE 47: PERCENTAGE DISTRIBUTION OF STATE AND LOCAL TAX REVENUE, FISCAL YEARS 1926 AND 1927

(Computed by National Industrial Conference Board)

States and Geographic Divisions	1926			1927		
	Property Taxes	Other Taxes	Licenses and Permits	Property Taxes	Other Taxes	Licenses and Permits
Maine.....	77.92	4.31	17.77	75.19	4.27	20.54
New Hampshire.....	76.52	7.83	15.65	76.09	8.27	15.64
Vermont.....	75.95	6.08	17.97	73.98	6.93	19.09
Massachusetts.....	76.76	16.78	6.46	76.33	17.69	5.98
Rhode Island.....	84.98	2.04	12.98	83.51	2.77	13.72
Connecticut.....	75.31	4.93	19.76	74.06	4.66	21.28
New England.....	77.07	11.93	11.00	76.21	12.41	11.38
New York.....	76.39	14.65	8.96	75.51	14.97	9.52
New Jersey.....	88.63	3.25	8.12	87.72	5.55	7.73
Pennsylvania.....	81.14	5.18	13.68	80.23	5.63	14.14
Middle Atlantic.....	79.82	10.04	10.14	78.93	10.61	10.46
Ohio.....	85.98	1.67	12.35	85.21	1.93	12.86
Indiana.....	86.07	1.68	12.25	85.02	1.93	13.05
Illinois.....	85.67	2.15	12.18	86.15	1.68	12.17
Michigan.....	84.57	2.15	13.28	85.37	1.81	12.82
Wisconsin.....	77.22	11.09	11.69	73.48	13.49	13.03
East North Central.....	84.54	3.06	12.40	84.01	3.28	12.71
Minnesota.....	78.43	1.05	20.52	77.29	1.21	21.50
Iowa.....	83.04	1.66	15.30	82.82	1.61	15.57
Missouri.....	77.28	5.39	17.33	77.60	4.96	17.44
North Dakota.....	86.90	3.20	9.90	86.06	3.59	10.35
South Dakota.....	83.09	1.41	15.50	82.95	1.46	15.59
Nebraska.....	86.22	0.96	12.82	85.46	1.18	13.36
Kansas.....	85.48	1.04	13.48	84.36	1.36	14.28
West North Central.....	81.67	2.17	16.16	81.08	2.22	16.70
Delaware.....	61.22	24.28	14.50	60.27	23.91	15.82
Maryland.....	80.56	1.64	17.80	79.08	1.19	19.73
District of Columbia.....	82.36	0.02	17.62	82.42	0.02	17.56
Virginia.....	65.82	6.80	27.38	63.42	8.45	28.13
West Virginia.....	80.18	2.45	17.37	78.18	2.71	19.11
North Carolina.....	69.17	9.86	20.97	68.11	9.17	22.72
South Carolina.....	64.46	7.09	28.45	63.63	7.65	28.72
Georgia.....	71.59	2.66	25.75	68.09	2.58	29.33
Florida.....	74.07	1.99	23.94	78.20	0.69	21.11
South Atlantic.....	72.78	4.86	22.36	72.21	4.66	23.13
Kentucky.....	78.64	2.38	18.98	76.67	2.20	21.13
Tennessee.....	72.73	3.38	23.89	73.36	3.06	23.58
Alabama.....	71.83	1.85	26.32	68.65	1.39	29.96
Mississippi.....	75.92	7.40	16.68	74.83	6.73	18.44
East South Central.....	75.06	3.76	21.18	73.73	3.36	22.91
Arkansas.....	65.78	6.72	27.50	69.54	5.73	24.73
Louisiana.....	80.51	1.57	17.92	78.48	1.59	19.93
Oklahoma.....	74.20	1.09	24.71	70.99	0.90	28.11
Texas.....	79.09	2.14	18.77	76.15	2.03	21.82
West South Central.....	76.81	2.24	20.95	74.68	2.07	23.25
Montana.....	82.02	4.63	13.35	82.79	3.09	14.12
Idaho.....	83.74	0.36	15.90	81.79	0.66	17.55
Wyoming.....	83.94	1.47	14.59	82.70	1.28	16.02
Colorado.....	87.00	1.85	11.15	85.46	1.75	12.79
New Mexico.....	85.49	0.22	14.29	83.07	0.17	16.76
Arizona.....	88.34	2.28	9.38	86.91	2.33	10.76
Utah.....	86.00	2.32	11.68	85.69	1.97	12.34
Nevada.....	83.37	2.26	14.37	82.37	2.35	15.28
Mountain.....	85.33	2.12	12.55	84.30	1.81	13.89
Washington.....	84.85	0.67	14.48	84.57	0.66	14.77
Oregon.....	78.90	1.52	19.58	78.51	1.55	19.94
California.....	76.69	2.20	21.11	78.28	2.44	19.28
Pacific.....	78.35	1.86	19.79	79.43	2.01	18.56
United States.....	79.86	5.59	14.55	79.18	5.83	14.99

"Other taxes" in Table 44 consists of poll tax collections exclusively.

Combined State and Local Tax Revenue

Data on the sources of state and local tax collections for the fiscal years ended in 1926 and 1927 are shown in combined form in Tables 46 and 47. Property taxes collected by all state and local governments for the fiscal year ended in 1927 amounted to \$4,531 millions, or 79% of all state and local taxes. Although state and local property tax collections in the fiscal year ended in 1927 exceeded collections in the preceding year by \$220 millions, the proportion of property taxes to total tax collections showed a slight decline. Table 45 indicates there was a slight increase in the fiscal year ended in 1927 in the proportion of local property taxes to total local tax revenues. This slight increase in the proportion of local property tax collections to total local tax collections tends to minimize the effect of the considerable decline in state property tax collections, when the data are presented in combined form.

In the fiscal years ended in 1926 and 1927, New Jersey had a higher proportion of property tax collections to combined state and local tax collections from all sources than any other state. The proportion for this state was 88.6% for the fiscal year ended in 1926 and 87.7% for the following year. In both years Delaware had a lower proportion than any other state. Although the 1927 proportion of property tax collections to total state and local tax collections for the United States as a whole was less than one per cent lower than the 1926 proportion, the downward tendency was evident in three-fourths of the states¹ and in all geographic divisions except the Pacific.

Licenses and permits have increased in importance as producers of state and local revenue, but the receipts from these sources in the fiscal year ended in 1927 amounted to only 15% of combined state and local tax revenues. However, receipts from licenses and permits for the fiscal year ended

¹ In the following states the 1927 ratio was higher than the 1926 ratio: Illinois, Michigan, Missouri, Florida, Tennessee, Arkansas, Montana, and California. The 1927 ratio was also higher for the District of Columbia.

in 1927 exceeded those of the preceding fiscal year by more than 9%. State and local receipts from licenses and permits in 1927 were greater than in 1926 in forty-three states and the District of Columbia, the only exceptions being Massachusetts, South Dakota, Florida, Arkansas and California. In nine states¹ and the District of Columbia, the 1927 proportion of licenses and permits to total state and local tax collections was lower than the proportion for 1926.

Although inheritance, corporation, and income taxes have assumed important places in the revenue systems of the various states, in 1927 the proportion of combined state and local revenues derived from these special taxes² was less than 6%. The proportion for the fiscal year ended in 1927, however, was higher than for the preceding year. Delaware obtains a larger proportion of its state and local revenues from such taxes than any other state, while for both years for which data are presented in Tables 46 and 47, New Mexico obtained a smaller proportion of combined state and local tax revenues from these sources than any other state.

¹ New Hampshire, Massachusetts, New Jersey, Illinois, Michigan, Florida, Tennessee, Arkansas and California.

² Other than special property taxes, but including poll taxes.

CHAPTER V

HIGHWAY FINANCE

THE financing of state and local highways is one of the most important aspects of state and local fiscal administration. New taxes have been introduced in order to obtain funds with which to carry on the extensive highway programs, and a large part of the state and local indebtedness now outstanding has been incurred for such purposes. In practically every legislative session in the United States questions arise concerning the raising of revenue for highway purposes. The importance of highway financing in state and local fiscal administration seems to warrant a special chapter devoted to the principal facts concerning highway expenditures and income for recent years.

HIGHWAY EXPENDITURES

State and local¹ governments expended \$1,554 millions for highways in 1928 as compared with \$1,277 millions in 1926, an increase of 21.7%. In 1928 the expenditures of the states alone for all highway purposes amounted to \$792 millions, or 50.9% of total highway expenditures. From 1926 to 1928 state expenditures for highways increased more rapidly than local expenditures; the increase in state expenditures amounted to 32.4%, while local highway expenditures increased only 12.3%.²

In only five states, Missouri, Delaware, West Virginia, North Carolina and Florida, were state and local highway expenditures less in 1928 than in 1926. When states are grouped according to geographic divisions, it is found that in each division expenditures were greater in 1928 than in

¹ Unless otherwise noted, "local" as used in this chapter does not include city expenditures for streets, bridges and other "highway" purposes.

² For 1926 figures, see "Cost of Government in the United States, 1926-1927," pp. 26 and 27.

TABLE 48: DISTRIBUTION OF HIGHWAY EXPENDITURES, CALENDAR YEAR 1928
(Source: U. S. Bureau of Public Roads. Computed by National Industrial Conference Board)

States and Geographic Divisions	Total Expenditures (in thousands)	State Expenditures (in thousands)	Local Expenditures (in thousands)	Per Cent State Expenditures of Total Expenditures	Construction of Roads and Bridges		Maintenance of Roads and Bridges		Miscellaneous Expenditures		Bonds, Notes, etc., Payments on Principal		Payments for Interest	
					Amount (in thousands)	Per Cent	Amount (in thousands)	Per Cent	Amount (in thousands)	Per Cent	Amount (in thousands)	Per Cent	Amount (in thousands)	Per Cent
Maine.....	\$13,852	\$11,052	\$2,800	79.79	\$7,813	56.40	\$4,021	29.03	\$852	6.15	\$543	3.92	\$623	4.50
New Hampshire.....	7,728	5,470	2,258	70.78	2,684	34.73	4,302	55.67	742	9.60	..	..	..	..
Vermont.....	6,602	5,762	840	87.28	4,303	65.18	1,976	29.93	323	4.89	..	..	..	..
Massachusetts.....	26,846	13,800	13,046	51.40	16,120	60.04	8,196	30.53	926	3.45	590	2.20	1,014	3.78
Rhode Island.....	5,520	4,518	1,002	81.85	2,402	43.52	2,328	42.17	418	7.57	143	2.59	229	4.15
Connecticut.....	19,550	16,419	3,131	83.98	13,035	66.68	6,421	32.84	94	0.48	..	..	..	..
New England.....	80,098	57,021	23,077	71.19	46,357	57.88	27,244	34.01	3,355	4.19	1,276	1.59	1,866	2.33
New York.....	105,455	57,018	48,437	54.07	68,735	65.18	25,176	23.88	3,525	3.34	560	0.53	7,459	7.07
New Jersey.....	58,239	32,419	25,820	55.67	39,634	68.06	11,648	20.00	241	0.41	4,443	7.63	2,273	3.90
Pennsylvania.....	106,127	54,597	51,530	51.44	42,968	40.49	29,766	28.05	12,590	11.86	11,144	10.50	9,659	9.10
Middle Atlantic.....	269,821	144,034	125,787	53.38	151,337	56.09	66,590	24.68	16,356	6.06	16,147	5.98	19,391	7.19
Ohio.....	91,009	33,953	59,056	36.51	42,403	45.59	25,093	26.98	1,113	1.20	18,900	20.32	5,500	5.91
Indiana.....	58,329	16,544	41,785	28.36	24,046	41.22	16,458	28.22	1,614	2.77	12,265	21.03	3,946	6.76
Illinois.....	83,675	53,472	30,203	63.90	53,113	63.48	19,967	23.86	1,482	1.77	3,926	4.69	5,187	6.20
Michigan.....	78,288	26,765	51,523	34.19	39,256	50.17	22,881	29.23	1,098	1.40	11,107	14.19	3,946	5.04
Wisconsin.....	44,236	16,541	27,695	37.39	22,905	51.78	14,092	31.86	4,298	9.71	985	2.23	1,956	4.42
East North Central.....	357,537	147,275	210,262	41.19	181,723	50.83	98,491	27.55	9,605	2.68	47,183	13.20	20,535	5.74
Minnesota.....	42,576	18,412	24,164	43.25	26,052	61.19	9,596	22.54	3,017	7.09	1,171	2.75	2,740	6.43
Iowa.....	59,804	35,035	24,769	58.58	38,713	64.73	16,458	27.52	987	1.65	1,887	3.16	1,759	2.94
Missouri.....	31,768	18,991	12,787	59.75	17,037	53.63	7,400	23.29	2,039	6.42	2,624	8.26	2,668	8.40
North Dakota.....	7,936	3,564	4,372	44.91	6,348	79.99	1,299	16.37	217	2.73	60	0.76	12	0.15
South Dakota.....	13,910	5,893	8,017	42.37	8,233	59.19	4,699	33.78	824	5.92	140	1.01	14	0.10
Nebraska.....	16,112	6,984	9,128	43.35	9,867	61.24	5,212	32.35	732	4.54	100	0.62	201	1.25
Kansas.....	31,093	13,904	17,189	44.72	18,089	58.18	8,388	26.98	1,959	6.30	1,457	4.68	1,200	3.86
West North Central.....	203,199	102,773	100,426	50.58	124,339	61.19	53,052	26.11	9,775	4.81	7,439	3.66	8,594	4.23

Delaware.....	4,878	3,377	1,501	69.23	2,470	50.63	778	15.95	274	5.62	514	10.54	842	17.26
Maryland.....	14,636	10,668	3,968	72.89	6,973	47.64	6,728	45.97	292	2.00	258	1.76	385	2.63
Virginia.....	24,206	14,239	9,967	58.82	13,051	53.92	8,411	34.75	80	0.33	1,184	4.89	1,480	6.11
West Virginia.....	29,871	16,207	13,664	54.26	14,501	48.54	5,812	19.46	905	3.03	4,372	14.64	4,281	14.33
North Carolina.....	53,485	24,675	28,810	46.13	20,869	39.02	9,576	17.90	2,383	4.46	9,196	17.19	11,461	21.43
South Carolina.....	26,477	18,976	7,501	71.67	17,596	66.46	5,229	19.75	724	2.73	1,153	4.36	1,775	6.70
Georgia.....	27,488	12,728	14,760	46.30	14,769	53.73	9,085	33.05	1,236	4.50	862	3.13	1,536	5.59
Florida.....	46,792	14,343	32,449	30.65	25,594	54.70	7,056	15.08	2,668	5.70	2,236	4.78	9,238	19.74
South Atlantic.....	227,833	115,213	112,620	50.57	115,823	50.84	52,675	23.12	8,562	3.76	19,775	8.68	30,998	13.60
Kentucky.....	21,159	14,261	6,898	67.40	13,283	62.78	4,994	23.60	849	4.01	988	4.67	1,045	4.94
Tennessee.....	29,223	19,172	10,051	65.61	15,000	51.33	8,903	30.47	1,722	5.89	726	2.48	2,872	9.83
Alabama.....	30,750	20,110	10,640	65.40	16,979	55.22	5,887	19.14	2,494	8.11	2,662	8.66	2,728	8.87
Mississippi.....	28,570	6,281	22,289	21.98	10,232	35.81	10,577	37.02	1,204	4.21	3,227	11.30	3,330	11.66
East South Central....	109,702	59,824	49,878	54.53	55,494	50.59	30,361	27.68	6,269	5.71	7,603	6.93	9,975	9.09
Arkansas.....	38,646	30,316	8,330	78.45	21,028	54.41	4,913	12.71	572	1.48	8,950	23.16	3,183	8.24
Louisiana.....	20,923	11,143	9,780	53.26	8,432	40.30	5,236	25.03	1,370	6.55	2,842	13.58	3,043	14.54
Oklahoma.....	26,308	13,251	13,057	50.37	12,934	49.16	10,280	39.08	1,064	4.04	1,000	3.80	1,030	3.92
Texas.....	57,210	28,710	28,500	50.18	19,634	34.32	21,977	38.41	2,899	5.07	6,000	10.49	6,700	11.71
West South Central....	143,087	83,420	59,667	58.30	62,028	43.35	42,406	29.64	5,905	4.13	18,792	13.13	13,956	9.75
Montana.....	8,878	3,863	5,015	43.51	4,528	51.00	2,660	29.96	400	4.51	750	8.45	540	6.08
Idaho.....	10,863	5,413	5,450	49.83	5,272	48.53	2,050	18.87	1,655	15.24	737	6.78	1,149	10.58
Wyoming.....	4,524	3,600	924	79.58	2,810	62.11	1,496	33.07	63	1.39	25	0.55	130	2.88
Colorado.....	11,842	6,957	4,885	58.75	5,609	47.36	3,814	32.21	1,375	11.61	600	5.07	444	3.75
New Mexico.....	7,063	6,603	4,600	93.49	4,266	60.40	1,413	20.00	623	8.82	656	9.29	105	1.49
Arizona.....	4,350	2,443	1,907	56.16	1,345	30.92	1,738	39.95	889	20.44	191	4.39	187	4.30
Utah.....	5,403	3,992	1,411	73.88	2,509	46.44	1,459	27.00	306	9.36	517	9.57	412	7.63
Nevada.....	2,903	2,167	736	74.65	1,555	53.57	704	24.25	345	11.88	209	7.20	90	3.10
Mountain.....	55,826	35,038	20,788	62.76	27,894	49.96	15,334	27.47	5,856	10.49	3,685	6.60	3,057	5.48
Washington.....	21,637	11,833	9,804	54.69	12,703	58.71	6,776	31.31	564	2.61	800	3.70	794	3.67
Oregon.....	23,128	12,860	12,860	44.40	10,721	46.36	6,123	26.47	2,598	2.59	3,000	12.97	2,686	11.61
California.....	62,300	24,965	37,335	40.07	30,190	48.46	19,580	31.43	2,340	3.76	4,598	7.38	5,592	8.97
Pacific.....	107,065	47,066	59,999	43.96	53,614	50.08	32,479	30.34	3,502	3.27	8,398	7.84	9,072	8.47
United States.....	\$1,554,168	\$791,664	\$762,504	50.94	\$818,609	52.67	\$418,632	26.94	\$69,185	4.45	\$130,298	8.38	\$117,444	7.56

1926, although the increase in the South Atlantic division was negligible.

Table 48 shows significant differences among the states in the extent to which highway activities are financed by the state governments. The largest proportion of state highway expenditures to the combined state and local highway expenditures in 1928 was 93.5% for New Mexico, and the smallest proportion was 22.0% for Mississippi. The states within a given geographic division do not show a high degree of similarity in the proportion of state highway expenditures to combined state and local expenditures except in the Middle Atlantic division.

Highway expenditures for every purpose, as given in Table 48, were greater in 1928 than in 1926, with the exception of miscellaneous expenditures. Expenditures for construction amounted to \$819 millions in 1928 as compared with \$693 millions in 1927 and \$617 millions in 1926. The proportion of total expenditures for this function was 52.7% in 1928, 48.9% in 1927, and 48.3% in 1926. Expenditures for construction formed a larger part of total highway expenditures in North Dakota in 1928 than in any other state, the proportion for this state being 80.0%. Arizona, with expenditures for construction amounting to only 30.9% of total highway expenditures, had a lower proportion than any other state.

Expenditures for maintenance amounted to \$419 millions in 1928 as compared with \$377 millions in 1927 and \$339 millions in 1926. Such expenditures accounted for 26.9% of total highway expenditures in 1928 as compared with 26.5% in each of the two preceding years. As in the case of expenditures for construction, there are wide differences among states in the proportion of expenditures for maintenance to total highway expenditures. The proportion for each state is shown in the functional distribution included in Table 48.

Payments for highway debt service amounted to \$248 millions in 1928 as compared with \$245 millions in 1927. Payments on the principal of the highway debt amounted to \$130 millions in 1928 and interest payments totalled \$117 millions. The proportion of expenditures for debt service

to total highway expenditures was lower in 1928 than in either of the two preceding years.

In three states, New Hampshire, Vermont, and Connecticut, there were no payments in 1928 for highway debt service. Payments on the principal of highway debt in 1928 constituted 23.2% of total highway expenditures in Arkansas, a larger proportion than in any other state. North Carolina had the largest proportion of interest payments to total highway expenditures, 21.4%. Combined payments for debt service were also relatively larger in North Carolina than in any other state.

Miscellaneous highway expenditures amounted to \$69 millions in 1928 as compared with \$104 millions in 1927 and \$108 millions in 1926.

HIGHWAY INCOME

State and local highway income amounted to \$1,567 millions in 1928, an increase of 6.9% over the preceding year. Of the total highway income for 1928, \$1,214 millions, or 77.5%, represented current state and local revenue, while the remainder consisted of \$81 millions of federal aid funds and \$272 millions received from the sale of bonds.

Table 49 shows the sources of state and local highway income in 1926, 1927 and 1928 for each state and geographic division, as well as for the United States as a whole; the percentage distribution is given in Table 50. The most significant feature of highway income in these years is the fact that the increase in total income is entirely attributable to increased current state and local revenue¹ for highway purposes. The receipts from the sale of highway bonds were practically equal in each of the three years, and the same was true of the amount of federal aid funds used. Federal aid funds used in 1928 amounted to 5.2% of total highway income as compared with 5.5% in 1927 and 5.9% in 1926. Receipts from the sale of bonds amounted to 17.3% of total income in 1928 as compared with 18.6% in 1927 and 20.2% in 1926.

Since the receipts from two of the three sources given in

¹ Exclusive of federal aid funds used during the year.

TABLE 49: SOURCES OF STATE AND LOCAL HIGHWAY INCOME, BY STATES AND GEOGRAPHIC DIVISIONS,
1926, 1927 AND 1928
(Source: U. S. Bureau of Public Roads, Computed by National Industrial Conference Board)
(Amounts in thousands)

States and Geographic Divisions	1926					1927					1928					Per Cent Increase or (-) Decrease in Total Income	
	Federal Aid ¹	State and Local Revenue ²	Bonds	Total Income	Federal Aid ¹	State and Local Revenue ²	Bonds	Total Income	Federal Aid ¹	State and Local Revenue ²	Bonds	Total Income					
Maine.....	\$763	\$8,122	\$2,719	\$11,604	\$632	\$9,644	\$546	\$10,822	\$242	\$11,718	\$914	\$12,874	-6.74	18.96			
New Hampshire.....	306	4,314	..	4,620	454	7,021	..	7,475	373	7,370	..	7,743	61.80	3.59			
Vermont.....	706	3,600	..	4,306	702	4,186	..	4,888	694	4,712	5,000	10,406	13.52	112.89			
Massachusetts.....	812	25,611	..	26,423	884	22,078	1,290	24,252	966	24,534	2,004	25,704	8.22	5.99			
Rhode Island.....	521	3,805	..	4,326	430	3,892	3,550	7,872	425	4,554	295	5,274	81.97	-33.00			
Connecticut.....	179	15,842	245	16,266	614	16,898	..	17,512	415	15,557	..	15,972	7.66	-8.79			
New England.....	3,287	61,294	2,964	67,945	3,716	63,719	5,386	72,821	3,115	68,445	6,413	77,973	7.81	7.07			
New York.....	3,613	56,010	23,896	83,519	3,647	72,678	3,675	80,000	3,635	92,135	..	95,770	-4.21	19.71			
New Jersey.....	1,251	29,265	18,104	48,620	1,072	30,801	25,222	57,095	732	40,465	10,425	51,622	17.43	-9.59			
Pennsylvania.....	2,327	75,455	40,032	117,814	3,569	87,922	10,832	102,323	3,821	91,234	15,502	110,557	-13.15	8.05			
Middle Atlantic.....	7,191	160,730	82,032	249,953	8,288	191,401	39,729	239,418	8,188	223,834	25,927	257,949	-4.21	7.74			
Ohio.....	2,450	53,613	20,144	76,207	2,368	79,015	17,680	99,063	3,347	74,839	17,150	95,336	29.99	-3.76			
Indiana.....	2,499	39,250	10,870	52,619	2,076	39,755	10,824	52,655	2,656	43,566	11,517	57,739	0.07	9.66			
Illinois.....	2,037	39,997	6,388	48,422	2,998	47,902	13,342	64,242	4,055	44,654	36,353	85,062	32.67	32.41			
Michigan.....	2,800	52,432	6,688	61,920	2,664	56,963	7,424	67,051	2,369	76,565	8,240	87,174	8.29	30.01			
Wisconsin.....	1,701	33,004	2,231	36,936	2,357	37,285	5,213	44,955	2,959	43,874	4,587	51,420	21.71	14.38			
East North Central.....	11,487	218,296	46,321	276,104	12,463	260,920	54,583	327,966	15,386	283,498	77,847	376,731	18.78	14.87			
Minnesota.....	2,842	32,286	1,011	36,139	2,056	37,080	1,020	40,156	2,241	38,542	1,015	41,798	11.12	4.09			
Iowa.....	2,122	29,854	4,324	36,300	2,573	33,287	1,274	37,134	2,832	36,757	21,618	61,207	2.30	64.83			
Missouri.....	3,924	24,482	15,498	43,904	3,468	26,359	5,613	35,440	2,883	27,927	2,274	32,584	-19.28	-8.06			
North Dakota.....	929	6,227	95	7,251	2,550	6,639	9,189	11,445	1,151	6,999	..	8,150	26.73	-11.31			
South Dakota.....	1,464	11,071	85	12,620	718	10,727	..	11,445	1,565	11,510	..	13,075	-9.31	14.24			
Nebraska.....	2,355	11,787	192	14,334	2,424	14,167	..	16,591	1,816	14,114	..	15,930	15.75	-3.98			
Kansas.....	1,749	29,460	1,297	32,506	3,466	28,808	2,708	34,982	2,288	26,323	1,543	30,154	7.62	-13.80			
West North Central.....	15,385	145,167	22,502	183,054	17,255	157,067	10,615	184,937	14,276	162,172	26,450	202,898	1.03	9.71			

Delaware.....	241	2,819	2,122	5,182	511	2,855	1,083	4,449	210	2,799	1,337	4,346	-14.15	-2.32
Maryland.....	720	10,786	2,782	14,288	720	10,750	3,173	14,643	731	10,714	2,549	13,994	2.48	-4.43
Virginia.....	2,514	17,547	985	21,046	1,869	19,954	1,558	23,381	1,439	22,507	1,376	25,322	11.09	8.30
West Virginia.....	464	30,920	13,076	30,920	1,262	17,235	12,000	30,497	1,215	20,117	7,991	29,323	-1.37	-3.85
North Carolina.....	3,098	43,124	25,939	72,161	1,713	39,702	29,642	70,057	1,716	37,037	20,040	59,793	-1.53	-17.26
South Carolina.....	1,559	13,239	848	15,646	1,123	11,677	13,658	26,458	1,134	12,858	8,574	22,566	69.10	-14.71
Georgia.....	2,571	18,132	2,781	23,484	2,746	23,750	1,566	28,062	1,900	22,619	2,435	26,954	19.49	-3.95
Florida.....	1,008	37,283	25,668	63,959	1,688	35,714	37,764	75,166	873	29,820	5,383	36,076	17.52	-52.00
South Atlantic.....	12,175	160,310	74,201	246,686	11,632	161,637	100,444	273,713	9,218	158,471	49,685	217,374	10.96	-20.58
Kentucky.....	1,629	14,844	3,243	19,716	1,420	17,649	3,461	22,520	2,008	16,221	3,462	21,691	14.27	-3.72
Tennessee.....	2,378	4,382	4,382	22,924	1,812	17,557	7,841	27,210	1,161	18,009	13,939	33,109	18.70	21.68
Alabama.....	1,619	10,943	5,781	18,343	1,251	15,277	5,213	21,741	2,977	16,277	11,798	31,052	18.52	42.83
Mississippi.....	1,413	19,080	5,748	26,241	1,945	21,567	9,112	32,121	1,511	23,252	8,511	33,254	22.41	3.53
East South Central.....	7,039	61,031	19,154	87,224	6,428	71,547	25,627	103,602	7,657	73,739	37,710	119,106	18.78	14.96
Arkansas.....	1,708	14,032	55	15,795	505	10,882	13,236	24,623	1,119	17,349	18,173	36,641	55.89	48.81
Louisiana.....	876	12,543	8,307	21,726	1,073	16,738	2,854	20,665	954	17,395	479	18,328	-4.88	-8.89
Oklahoma.....	1,920	20,585	1,919	24,424	1,207	21,154	1,500	23,861	1,688	22,740	1,200	25,628	-2.31	7.41
Texas.....	4,801	35,712	6,846	47,359	4,965	41,123	10,500	56,588	4,278	49,693	14,000	67,971	19.49	20.12
West South Central.....	9,305	82,872	17,127	109,304	7,750	89,897	28,090	125,737	8,039	107,177	33,852	149,068	15.03	18.56
Montana.....	660	4,879	122	5,661	895	5,026	120	6,041	1,745	6,225	120	8,090	6.71	33.92
Idaho.....	1,399	5,374	266	7,039	1,067	6,860	66	7,993	1,245	8,473	451	10,169	13.55	27.22
Wyoming.....	784	2,898	12	3,694	930	2,950	..	3,880	1,391	2,987	..	4,378	5.04	12.84
Colorado.....	1,136	7,268	2,102	10,506	1,148	8,555	..	9,703	1,730	8,766	..	10,496	-7.64	8.17
New Mexico.....	1,020	1,994	113	3,127	1,482	2,444	1,447	5,673	1,819	3,531	2,154	7,406	81.42	32.28
Arizona.....	558	3,317	..	3,875	721	3,407	..	4,128	422	4,593	103	5,118	6.53	23.98
Utah.....	908	2,464	..	3,451	996	3,648	..	4,797	1,106	4,483	..	5,589	39.00	16.51
Nevada.....	931	1,203	..	2,134	1,691	1,691	135	2,822	1,041	1,847	106	2,994	32.24	6.09
Mountain.....	7,396	29,397	2,694	39,487	8,688	34,581	1,768	45,037	10,499	40,905	2,934	54,338	14.06	20.65
Washington.....	1,357	16,554	82	17,993	699	16,524	95	17,318	1,380	19,314	110	20,804	-3.75	20.13
Oregon.....	1,265	15,666	3,788	20,719	1,112	16,466	4,000	21,578	582	16,598	3,750	20,930	4.15	-3.00
California.....	3,276	45,792	1,557	50,625	2,429	49,497	1,723	53,649	2,458	60,289	7,028	69,775	5.97	30.06
Pacific.....	5,898	78,012	5,427	89,337	4,240	82,487	5,818	92,545	4,420	96,201	10,888	111,509	3.59	20.49
United States.....	\$79,163	\$997,109	\$272,422	\$1,348,694	\$80,460	\$1,113,256	\$272,060	\$1,465,776	\$80,798	\$1,214,442	\$271,706	\$1,566,946	8.68	6.90

¹ Includes only federal aid funds used during the year.

² Current state and local income from taxes and miscellaneous sources specifically allocated or appropriated for highway purposes.

TABLE 50: PERCENTAGE DISTRIBUTION OF STATE AND LOCAL HIGHWAY INCOME, BY STATES
AND GEOGRAPHIC DIVISIONS, 1926, 1927 AND 1928
(Source: U. S. Bureau of Public Roads. Computed by National Industrial Conference Board)

States and Geographic Divisions	1926			1927			1928		
	Federal Aid ¹	State and Local Revenues ²	Bonds	Federal Aid ¹	State and Local Revenues ²	Bonds	Federal Aid ¹	State and Local Revenues ²	Bonds
Maine.....	6.58	69.99	23.43	5.84	89.11	5.05	1.88	91.02	7.10
New Hampshire.....	6.62	93.38	..	6.07	93.93	..	4.82	95.18	48.05
Vermont.....	16.40	83.60	..	14.36	85.64	..	6.67	45.28	0.79
Massachusetts.....	3.07	96.93	..	3.64	91.04	5.32	3.76	95.45	5.59
Rhode Island.....	12.04	87.96	..	5.46	49.44	45.10	8.06	86.35	..
Connecticut.....	1.10	97.39	1.51	3.51	96.49	..	2.60	97.40	8.22
New England.....	4.87	90.74	4.39	5.10	87.50	7.40	4.00	87.78	..
New York.....	4.33	67.06	28.61	4.56	90.85	4.59	3.80	96.20	..
New Jersey.....	2.57	60.19	37.24	1.88	53.95	44.17	1.42	78.39	20.19
Pennsylvania.....	1.97	64.05	33.98	3.49	85.92	10.59	3.46	82.52	14.02
Middle Atlantic.....	2.88	64.30	32.82	3.46	79.95	16.59	3.17	86.78	10.05
Ohio.....	3.22	70.35	26.43	2.39	79.76	17.85	3.51	78.50	17.99
Indiana.....	4.75	74.59	20.66	3.94	75.50	20.56	4.60	75.45	19.95
Illinois.....	4.21	82.60	13.19	4.67	74.56	20.77	4.77	52.49	42.74
Michigan.....	4.52	84.68	10.80	3.97	84.96	11.07	2.72	87.83	9.45
Wisconsin.....	4.61	89.35	6.04	5.24	82.94	11.82	5.75	85.33	8.92
East North Central.....	4.16	79.06	16.78	3.80	79.56	16.64	4.09	75.25	20.66
Minnesota.....	7.86	89.34	2.80	5.12	92.34	2.54	5.36	92.21	2.43
Iowa.....	5.85	82.24	11.91	6.93	89.64	3.43	4.63	60.05	35.32
Missouri.....	8.94	55.76	35.30	9.78	74.38	15.84	7.31	85.71	6.98
North Dakota.....	12.81	85.88	1.31	27.75	72.25	..	14.12	85.88	..
South Dakota.....	11.60	87.73	0.67	6.27	93.73	..	11.97	88.03	..
Nebraska.....	16.43	82.23	1.34	14.61	85.39	..	11.40	88.60	..
Kansas.....	5.38	90.63	3.99	9.91	82.35	7.74	7.59	87.29	5.12
West North Central.....	8.41	79.30	12.29	9.33	84.93	5.74	7.03	79.93	13.04
Delaware.....	4.65	54.40	40.95	11.49	64.17	24.34	4.83	64.41	30.76
Maryland.....	5.04	75.49	19.47	4.92	73.41	21.67	5.22	76.56	18.22

Virginia.....	11.95	83.37	4.68	8.00	85.34	6.66	5.68	88.88	5.44
West Virginia.....	1.50	56.21	42.29	4.14	56.51	39.35	4.14	68.61	27.25
North Carolina.....	4.29	59.76	35.95	2.41	55.87	41.72	2.92	62.99	34.09
South Carolina.....	9.96	84.62	5.42	4.24	44.14	51.62	5.03	56.98	37.99
Georgia.....	10.95	77.21	11.84	9.79	84.63	5.58	7.05	83.92	9.03
Florida.....	1.58	58.29	40.13	2.25	47.51	50.24	2.42	82.66	14.92
South Atlantic.....	4.93	64.99	30.08	4.25	59.05	36.70	4.24	72.90	22.86
Kentucky.....	8.26	75.29	16.45	6.30	78.34	15.36	9.26	74.78	15.96
Tennessee.....	10.37	70.51	19.12	6.66	64.52	23.82	3.51	54.39	42.10
Alabama.....	8.83	59.66	31.51	5.75	70.27	23.98	9.59	52.42	37.99
Mississippi.....	5.39	72.71	21.90	6.05	65.58	28.37	4.54	69.86	25.60
East South Central.....	8.07	69.97	21.96	6.20	69.06	24.74	6.43	61.91	31.66
Arkansas.....	10.81	88.84	0.35	2.05	44.19	53.76	3.05	47.35	49.60
Louisiana.....	4.03	57.73	38.24	5.19	81.00	13.81	5.07	92.39	2.54
Oklahoma.....	7.86	84.28	7.86	5.06	88.65	6.29	6.59	88.73	4.68
Texas.....	10.14	75.41	14.45	8.77	72.67	18.56	6.29	73.11	20.60
West South Central.....	8.51	75.82	15.67	6.16	71.50	22.34	5.39	71.90	22.71
Montana.....	11.66	86.19	2.15	14.81	83.20	1.99	21.57	76.95	1.48
Idaho.....	19.87	76.35	3.78	13.35	85.82	0.83	12.24	83.32	4.44
Wyoming.....	21.22	78.45	0.33	23.97	76.03	..	31.77	68.23	..
Colorado.....	10.81	69.18	20.01	11.83	88.17	..	16.48	83.52	..
New Mexico.....	32.62	63.77	3.61	31.41	43.08	25.51	24.24	47.06	28.70
Arizona.....	14.40	85.60	..	17.47	82.53	..	8.25	89.74	2.01
Utah.....	26.31	71.40	2.29	23.95	76.05	..	19.79	80.21	..
Nevada.....	43.63	56.37	..	35.30	59.92	4.78	34.77	61.69	3.54
Mountain.....	18.73	74.45	6.82	19.29	76.78	3.93	19.32	75.28	5.40
Washington.....	7.54	92.00	0.46	4.04	95.41	0.55	6.63	92.84	0.53
Oregon.....	6.11	75.61	18.28	5.15	76.31	18.54	2.78	79.30	17.92
California.....	6.47	90.45	3.08	4.53	92.26	3.21	3.52	86.41	10.07
Pacific.....	6.60	87.32	6.08	4.58	89.13	6.29	3.96	86.27	9.77
United States.....	5.87	73.93	20.20	5.49	75.95	18.56	5.16	77.50	17.34

¹ See footnote 1, Table 49.

² See footnote 2, Table 49.

TABLE 51: SOURCES OF CURRENT STATE AND LOCAL HIGHWAY REVENUE OTHER THAN FEDERAL AID,
1926, 1927 AND 1928
(Source: U. S. Bureau of Public Roads. Computed by National Industrial Conference Board)
(Amounts in thousands)

States and Geographic Divisions	1926			1927			1928					
	Taxes and Appropriations ¹	Gasoline Tax and Motor Vehicle Licenses	Miscellaneous	Total	Taxes and Appropriations ¹	Gasoline Tax and Motor Vehicle Licenses	Miscellaneous	Total	Taxes and Appropriations ¹	Gasoline Tax and Motor Vehicle Licenses	Miscellaneous	Total
Maine.....	\$3,432	\$4,268	\$422	\$8,122	\$3,680	\$4,576	\$1,388	\$9,644	\$5,238	\$5,924	\$556	\$11,718
New Hampshire.....	1,890	2,277	147	4,314	3,720	3,099	202	7,021	3,810	3,319	241	7,370
Vermont.....	3,024	191	385	3,600	1,363	2,665	158	4,186	1,451	3,006	255	4,712
Massachusetts.....	14,100	11,261	250	25,611	9,232	12,459	387	22,078	12,088	12,178	268	24,534
Rhode Island.....	1,211	2,558	36	3,805	1,019	2,826	47	3,892	815	3,595	144	4,554
Connecticut.....	6,056	8,516	1,270	15,842	5,966	9,724	1,208	16,898	4,776	9,904	877	15,557
New England.....	29,713	29,071	2,510	61,294	24,980	35,349	3,390	63,719	28,178	37,926	2,341	68,445
New York.....	31,319	20,459	4,232	56,010	49,737	22,743	198	72,678	58,434	25,197	8,504	92,135
New Jersey.....	16,083	12,717	465	29,265	14,354	16,430	17	30,801	16,070	23,489	906	40,465
Pennsylvania.....	32,960	35,614	6,881	75,455	36,621	42,060	9,241	87,922	35,264	49,638	6,332	91,234
Middle Atlantic.....	80,362	68,790	11,578	160,730	100,712	81,233	9,456	191,401	109,768	98,324	15,742	223,834
Ohio.....	30,485	16,879	6,249	53,613	44,265	34,750	..	79,015	42,976	31,180	683	74,839
Indiana.....	26,046	12,914	290	39,250	25,937	13,457	361	39,755	27,597	15,512	457	43,566
Illinois.....	25,706	13,938	353	39,997	27,520	19,542	840	47,902	28,544	15,070	1,040	44,654
Michigan.....	23,752	27,160	1,520	52,432	26,481	28,043	2,439	56,963	29,394	44,308	2,863	76,565
Wisconsin.....	18,818	12,471	1,715	33,004	19,021	15,172	3,092	37,285	22,509	18,163	3,202	43,874
East North Central.....	124,807	83,362	10,127	218,296	143,224	110,964	6,732	260,920	151,020	124,233	8,245	283,498
Minnesota.....	14,968	14,829	2,489	32,286	20,347	15,258	1,475	37,080	20,464	15,657	2,421	38,542
Iowa.....	14,770	12,545	2,539	29,854	13,651	15,767	3,869	33,287	15,382	18,497	2,878	36,757
Missouri.....	8,051	13,876	2,555	24,482	9,947	14,546	1,866	26,359	9,520	15,485	2,927	27,927
North Dakota.....	4,188	1,921	118	6,227	4,000	2,554	85	6,639	4,043	2,927	29	6,999
South Dakota.....	6,439	4,409	223	11,071	4,532	4,554	1,641	10,727	6,169	5,126	215	11,510
Nebraska.....	4,921	6,568	298	11,787	6,456	7,286	425	14,167	6,001	7,783	328	14,114
Kansas.....	14,053	14,782	625	29,460	13,469	12,839	500	28,808	14,190	10,193	1,940	26,323
West North Central.....	67,390	68,930	8,847	145,167	72,402	74,804	9,861	157,067	75,769	75,670	10,733	162,172

Delaware.....	1,589	1,173	57	2,819	1,311	1,478	66	2,855	923	1,717	159	2,799
Maryland.....	5,893	3,893	1000	10,786	6,199	3,893	658	10,750	3,327	6,322	1,065	10,714
Virginia.....	7,146	8,616	1,785	17,547	6,063	7,916	2,975	19,954	6,597	12,788	3,122	22,507
West Virginia.....	10,128	7,000	252	17,380	9,680	10,919	146	17,235	11,322	8,639	156	20,117
North Carolina.....	13,830	14,350	14,944	43,124	13,586	14,014	12,102	39,702	14,547	18,943	3,547	37,037
South Carolina.....	3,909	6,342	2,988	13,239	2,934	7,055	1,688	11,677	3,751	7,923	1,284	12,858
Georgia.....	10,368	7,165	599	18,132	11,982	10,671	1,097	23,750	11,038	11,219	362	22,619
Florida.....	15,206	17,737	4,340	37,283	14,189	16,981	4,544	35,714	15,179	13,375	1,266	29,820
South Atlantic.....	68,069	66,276	25,965	160,310	65,944	72,417	23,276	161,637	66,684	80,826	10,961	158,471
Kentucky.....	6,607	7,808	429	14,844	6,979	9,952	718	17,649	7,008	8,744	469	16,221
Tennessee.....	7,967	7,326	871	16,164	7,283	7,377	2,897	17,557	7,726	8,720	1,563	18,009
Alabama.....	5,264	5,106	573	10,943	5,447	7,507	2,323	15,277	5,480	9,235	1,562	16,277
Mississippi.....	12,231	5,710	1,139	19,080	12,908	6,726	1,430	21,064	12,271	7,973	2,988	23,232
East South Central.....	32,069	25,950	3,012	61,031	32,617	31,562	7,368	71,547	32,485	34,672	6,582	73,739
Arkansas.....	5,892	7,890	250	14,032	2,400	8,001	481	10,882	2,150	15,036	163	17,349
Louisiana.....	5,926	6,502	115	12,543	8,408	7,108	1,222	16,738	8,409	7,660	1,326	17,395
Oklahoma.....	8,080	10,837	1,668	20,585	7,950	12,337	867	21,154	8,000	13,921	819	22,740
Texas.....	16,072	18,164	1,476	35,712	17,300	22,776	1,047	41,123	17,700	31,567	426	49,693
West South Central.....	35,970	43,393	3,509	82,872	36,058	50,222	3,617	89,897	36,259	68,184	2,734	107,177
Montana.....	2,877	1,724	278	4,879	2,970	1,781	275	5,026	2,970	2,994	261	6,225
Idaho.....	3,040	1,967	367	5,374	3,420	3,085	355	6,860	3,772	3,569	1,132	8,473
Wyoming.....	1,674	1,062	162	2,898	680	1,292	978	2,950	842	1,518	627	2,987
Colorado.....	3,813	3,133	322	7,268	4,124	4,137	294	8,555	3,805	4,735	226	8,766
New Mexico.....	911	1,026	57	1,994	841	1,551	52	2,444	1,001	2,486	44	3,531
Arizona.....	1,854	1,356	107	3,317	1,631	1,644	132	3,407	2,281	2,198	114	4,593
Utah.....	1,170	1,220	74	2,464	1,441	1,937	270	3,648	1,493	2,630	360	4,843
Nevada.....	780	302	121	1,203	786	705	200	1,691	776	781	290	1,847
Mountain.....	16,119	11,790	1,488	29,397	15,893	16,132	2,556	34,581	16,940	20,911	3,054	40,905
Washington.....	7,331	8,559	664	16,554	7,120	8,594	810	16,524	7,120	11,394	800	19,314
Oregon.....	5,698	8,912	1,056	15,666	5,300	10,138	1,028	16,466	5,300	10,284	1,014	16,598
California.....	23,666	21,416	710	45,792	23,226	25,360	911	49,497	23,663	33,086	1,540	60,289
Pacific.....	36,695	38,887	2,430	78,012	35,646	44,092	2,749	82,487	36,083	56,764	3,354	96,201
United States.....	\$491,194	\$436,449	\$69,466	\$997,109	\$527,476	\$516,775	\$69,005	\$1,113,256	\$553,186	\$597,510	\$63,746	\$1,214,442

¹ Does not include gasoline taxes and motor vehicle licenses.

TABLE 52: PERCENTAGE DISTRIBUTION OF CURRENT STATE AND LOCAL HIGHWAY REVENUE OTHER THAN FEDERAL AID, 1926, 1927 AND 1928

(Source: U. S. Bureau of Public Roads, Computed by National Industrial Conference Board)

States and Geographic Divisions	1926			1927			1928		
	Taxes and Appropriations	Miscellaneous	Gasoline Tax and Motor Vehicle Licenses	Taxes and Appropriations	Miscellaneous	Gasoline Tax and Motor Vehicle Licenses	Taxes and Appropriations	Miscellaneous	Gasoline Tax and Motor Vehicle Licenses
Maine.....	42.25	5.20	52.55	38.16	14.39	47.45	44.70	50.55	4.75
New Hampshire.....	43.81	3.41	52.78	44.14	2.88	51.70	51.70	45.03	3.27
Vermont.....	84.00	10.69	5.31	32.56	63.67	30.79	30.79	63.80	5.41
Massachusetts.....	55.05	0.98	43.97	41.82	1.75	56.83	49.27	49.64	1.09
Rhode Island.....	31.83	0.94	67.23	26.18	1.21	72.61	17.90	78.94	3.16
Connecticut.....	38.23	8.02	53.75	35.31	7.15	57.54	30.70	63.66	5.64
New England.....	48.48	4.09	47.43	39.20	5.32	55.48	41.17	55.41	3.42
New York.....	55.92	7.55	36.53	68.44	0.27	31.29	63.42	27.35	9.23
New Jersey.....	54.96	1.59	43.45	46.60	53.34	0.06	39.71	58.05	2.24
Pennsylvania.....	43.68	9.12	47.20	41.65	10.51	47.84	38.65	54.41	6.94
Middle Atlantic.....	50.00	7.20	42.80	52.62	4.94	42.44	49.04	43.93	7.03
Ohio.....	56.86	11.66	31.48	56.02	43.98	0.91	57.43	41.66	0.91
Indiana.....	66.36	0.74	32.90	65.24	33.85	3.73	63.34	35.61	1.05
Illinois.....	64.27	0.88	34.85	57.45	40.80	1.75	63.92	33.75	2.33
Michigan.....	45.30	2.90	51.80	46.49	49.23	38.39	38.39	57.87	3.74
Wisconsin.....	57.02	5.20	37.78	51.02	40.69	8.29	51.30	41.40	7.30
East North Central.....	57.17	4.64	38.19	54.89	42.53	2.58	53.27	43.82	2.91
Minnesota.....	46.36	7.71	45.93	54.87	41.15	3.98	53.10	40.62	6.28
Iowa.....	49.47	8.51	42.02	41.01	47.37	11.62	41.85	50.32	7.83
Missouri.....	32.88	10.44	56.68	37.74	55.18	7.08	34.09	55.45	10.46
North Dakota.....	67.26	1.89	30.85	60.25	38.47	1.28	57.77	41.82	0.41
South Dakota.....	58.16	2.01	39.83	42.25	42.45	15.30	53.60	44.53	1.87
Nebraska.....	41.75	2.53	55.72	45.57	51.43	3.00	42.52	55.16	2.32
Kansas.....	47.70	2.12	50.18	46.75	51.51	1.74	53.91	38.72	7.37
West North Central.....	46.42	6.09	47.49	46.10	47.62	6.28	46.72	46.66	6.62

Delaware.....	56.37	41.61	2.02	45.92	51.77	2.31	32.98	61.34	5.68
Maryland.....	54.64	36.09	9.27	57.67	36.21	6.12	31.05	59.01	9.94
Virginia.....	40.73	49.10	10.17	30.38	54.71	14.91	29.31	56.82	13.87
West Virginia.....	58.27	40.28	1.45	56.16	42.99	0.85	56.28	42.94	0.78
North Carolina.....	32.07	33.28	34.65	35.30	35.30	30.48	39.28	51.14	9.58
South Carolina.....	29.53	47.90	22.57	25.13	60.42	14.45	29.17	60.84	9.99
Georgia.....	57.18	39.52	3.30	50.45	44.93	4.62	48.80	49.60	1.60
Florida.....	40.79	47.57	11.64	39.73	47.55	12.72	50.90	44.85	4.25
South Atlantic.....	42.46	41.34	16.20	40.80	44.80	14.40	42.08	51.00	6.92
Kentucky.....	44.51	52.60	2.89	39.54	56.39	4.07	43.20	53.91	2.89
Tennessee.....	49.29	45.32	5.39	41.48	42.02	16.50	42.90	48.42	8.68
Alabama.....	48.10	46.66	5.24	35.65	49.14	15.21	33.67	56.74	9.59
Mississippi.....	64.10	29.93	5.97	61.28	31.93	6.79	52.82	34.32	12.86
East South Central.....	52.55	42.52	4.93	45.59	44.11	10.30	44.05	47.02	8.93
Arkansas.....	41.99	56.23	1.78	22.05	73.53	4.42	12.39	86.67	0.94
Louisiana.....	47.24	51.84	0.92	50.23	42.47	7.30	48.34	44.04	7.62
Oklahoma.....	39.25	52.65	8.10	37.58	58.32	4.10	35.18	61.22	3.60
Texas.....	45.01	50.86	4.13	42.07	55.38	2.55	35.62	63.52	0.86
West South Central.....	43.41	52.36	4.23	40.11	55.87	4.02	33.83	63.62	2.55
Montana.....	58.97	35.33	5.70	59.09	35.44	5.47	47.71	48.10	4.19
Idaho.....	56.57	36.60	6.83	49.86	44.97	5.17	44.52	42.12	13.36
Wyoming.....	57.76	36.65	5.59	23.05	43.80	33.15	28.19	50.82	20.99
Colorado.....	52.46	43.11	4.43	48.20	48.36	3.44	43.41	54.01	2.58
New Mexico.....	45.69	51.45	2.86	34.41	63.46	2.13	28.35	70.40	1.25
Arizona.....	55.89	40.88	3.23	47.87	48.25	3.88	49.66	47.86	2.48
Utah.....	47.49	49.51	3.00	39.50	53.10	7.40	33.30	58.67	8.03
Nevada.....	64.84	25.10	10.06	46.48	41.69	11.83	42.01	42.29	15.70
Mountain.....	54.83	40.11	5.06	45.96	46.65	7.39	41.41	51.12	7.47
Washington.....	44.29	51.70	4.01	43.09	52.01	4.90	36.87	58.99	4.14
Oregon.....	36.37	56.89	6.74	32.19	61.57	6.24	31.93	61.96	6.11
California.....	51.68	46.77	1.55	46.92	51.24	1.84	39.25	58.20	2.55
Pacific.....	47.04	49.85	3.11	43.22	53.45	3.33	37.51	59.00	3.49
United States.....	49.26	43.77	6.97	47.38	46.42	6.20	45.55	49.20	5.25

Table 50 remained practically constant during the years 1926, 1927 and 1928, an analysis of highway income involves primarily a consideration of the third source—current state and local revenue. For this reason, Tables 51 and 52 were compiled, in order to show in more detail the sources of current state and local highway revenue in each of the several states.

In 1928 gasoline taxes and motor vehicle licenses for the first time produced a larger amount of highway revenue than other taxes and appropriations for highway purposes. The respective amounts were \$598 millions and \$553 millions. Highway income from gasoline taxes and motor vehicle licenses was 36.9% larger in 1928 than in 1926, while the increase in income from taxes and appropriations amounted to 12.6%. It is thus seen that a large part of the increase in current highway revenue is attributable to increased receipts from gasoline taxes and motor vehicle licenses.

Taxes and appropriations exclusive of gasoline taxes and receipts from motor vehicle licenses accounted for \$553 millions of current highway revenue in 1928 as compared with \$527 millions in 1927 and \$491 millions in 1926. Although current revenue from this source was greater in each year than in the preceding one, the proportion of total current highway revenue derived from this source declined from 49.3% in 1926 to 45.6% in 1928. In a number of states the proportion of total current highway revenue¹ obtained from taxes and appropriations was greater in 1928 than in 1926, but the decline in the proportion in other states was very marked, with the result that only one geographic division, the West North Central, showed a greater proportion for 1928 than for 1926.

DISTRIBUTION OF HIGHWAY BOND ISSUES

As previously mentioned, new highway bond issues in 1928 accounted for \$272 millions of highway income. In Table 53 are shown the new issues in 1928 for each state, with the total for each state distributed between the state and local governments. State highway bonds accounted for 44.7%

¹ Federal aid funds used are not included in total current highway revenue.

TABLE 53: STATE AND LOCAL HIGHWAY BOND ISSUES, BY STATES AND GEOGRAPHIC DIVISIONS, CALENDAR YEAR 1928

(Source: U. S. Bureau of Public Roads. Computed by National Industrial Conference Board)

States and Geographic Divisions	Amounts (in thousands)			Percentage Distribution	
	Total	State	Local	State	Local
Maine.....	\$914	\$874	\$40	95.6	4.4
New Hampshire.....	..	..	..	..	..
Vermont.....	5,000	5,000	..	100.0	..
Massachusetts.....	204	..	204	..	100.0
Rhode Island.....	295	256	39	86.8	13.2
Connecticut.....	..	..	..	..	..
New England.....	6,413	6,130	283	95.6	4.4
New York.....	..	..	..	..	..
New Jersey.....	10,425	5,010	5,415	48.1	51.9
Pennsylvania.....	15,502	..	15,502	..	100.0
Middle Atlantic.....	25,927	5,010	20,917	19.3	80.7
Ohio.....	17,150	..	17,150	..	100.0
Indiana.....	11,517	..	11,517	..	100.0
Illinois.....	36,353	35,156	1,197	96.7	3.3
Michigan.....	8,240	..	8,240	..	100.0
Wisconsin.....	4,587	..	4,587	..	100.0
East North Central.....	77,847	35,156	42,691	45.2	54.8
Minnesota.....	1,015	..	1,015	..	100.0
Iowa.....	21,618	20,189 ¹	1,429	93.4	6.6
Missouri.....	2,274	..	2,274	..	100.0
North Dakota.....	..	..	..	..	..
South Dakota.....	..	..	..	..	..
Nebraska.....	..	..	..	..	..
Kansas.....	1,543	..	1,543	..	100.0
West North Central.....	26,450	20,189 ¹	6,261	76.3	23.7
Delaware.....	1,337	987	350	73.8	26.2
Maryland.....	2,549	1,239	1,310	48.6	51.4
Virginia.....	1,376	..	1,376	..	100.0
West Virginia.....	7,991	4,250	3,741	53.2	46.8
North Carolina.....	20,040	10,000	10,040	49.9	50.1
South Carolina.....	8,574	..	8,574	..	100.0
Georgia.....	2,435	..	2,435	..	100.0
Florida.....	5,383	..	5,383	..	100.0
South Atlantic.....	49,685	16,476	33,209	33.2	66.8
Kentucky.....	3,462	..	3,462	..	100.0
Tennessee.....	13,939	8,011	5,928	57.5	42.5
Alabama.....	11,798	10,085	1,713	85.5	14.5
Mississippi.....	8,511	..	8,511	..	100.0
East South Central.....	37,710	18,096	19,614	48.0	52.0
Arkansas.....	18,173	18,173	..	100.0	..
Louisiana.....	479	..	479	..	100.0
Oklahoma.....	1,200	..	1,200	..	100.0
Texas.....	14,000	..	14,000	..	100.0
West South Central.....	33,852	18,173	15,679	53.7	46.3
Montana.....	120	..	120	..	100.0
Idaho.....	451	..	451	..	100.0
Wyoming.....	..	..	..	..	..
Colorado.....	..	..	..	..	..
New Mexico.....	2,154	2,154	..	100.0	..
Arizona.....	103	..	103	..	100.0
Utah.....	..	..	..	..	..
Nevada.....	106	100	6	94.3	5.7
Mountain.....	2,934	2,254	680	76.8	23.2
Washington.....	110	..	110	..	100.0
Oregon.....	3,750	..	3,750	..	100.0
California.....	7,028	..	7,028	..	100.0
Pacific.....	10,888	..	10,888	..	100.0
United States.....	\$271,706	\$121,484	\$150,222	44.7	55.3

¹ County bond sales proceeds for use on state highways.

of the total new issues for the year, although such bonds were issued in only fifteen states. Illinois issued more than \$35 millions of state highway bonds in 1928, a larger amount than any other state.

Local governments in thirty-six states issued highway bonds in 1928 to the total amount of \$150 millions. More local highway bonds were issued in Ohio than in any other state, the amount being slightly more than \$17 millions.

CHAPTER VI

SUMMARY

FISCAL operations of state and local governments continued to expand rapidly in the fiscal years ended in 1927 and 1928. The Federal Government, on the other hand, followed a more conservative policy in matters of expansion. To a large degree, federal finances are still influenced by war-time factors, which account in part for the marked differences that are in evidence when federal fiscal operations are compared with those of state and local governments.

GOVERNMENTAL EXPENDITURES

Combined governmental expenditures amounted to \$12,179 millions for the fiscal year ended in 1927, an increase of approximately 5% over the expenditures for the preceding year. Per capita governmental expenditures amounted to \$102.67 for the fiscal year ended in 1927 as compared with \$99.17 for the preceding year.

Federal expenditures for the fiscal year ended in 1927 amounted to \$4,069 millions, or 33.4% of combined governmental expenditures. The payments for debt redemption were unusually large in that year, with the result that federal gross expenditures were larger than in either of the two succeeding years. The net expenditures of the Federal Government were larger in the fiscal year ended in 1928 than in the preceding year, and, in turn, larger in 1929 than in 1928. Federal net expenditures for the fiscal year ended in 1929 amounted to \$2,580 millions, and gross expenditures to \$3,932 millions.

Schools and highways accounted for three-fifths of combined state and local expenditures for the fiscal year ended in 1927. Educational expenditures are the largest item in the local budgets, while expenditures for highway purposes account for a larger proportion of total state expenditures than any other function.

PUBLIC INDEBTEDNESS

The federal debt has been reduced from its peak of \$25,482 millions in 1919 to \$16,931 millions on June 30, 1929. Retirements during the fiscal year ended in 1929 amounted to \$673 millions, as compared with \$906 millions in the fiscal year ended in 1928 and \$1,133 millions in the preceding year. The decrease in retirements in recent years is directly attributable to the smaller annual surplus of ordinary receipts over expenditures. Retirements chargeable to ordinary receipts amounted to \$550 millions for the fiscal year ended in 1929 and have increased each year since 1923.

The average interest rate on the federal interest-bearing debt outstanding on June 30, 1929 was 3.94%. The high rates paid on federal short-term obligations issued during the year accounted for the increase of 0.07% from the average rate of 3.87% on June 30, 1928. The average rate of interest on the federal interest-bearing debt exclusive of certificates of indebtedness declined from 3.90% on June 30, 1928, to 3.87% on June 30, 1929.

State and local bond issues in 1928 amounted to \$1,380 millions, a decline of \$95 millions from the preceding year. New bond issues by states were larger in 1928 than in 1927, while those of the several local issuing authorities were smaller in 1928 than in the preceding year. Bonds issued by state and local governments in 1928 bore interest at an average rate of 4.44%.

State and local net bonded indebtedness increased from \$7,264 millions in 1922 to \$11,739 millions in 1927 and \$12,579 millions in 1928. In the latter year the per capita state and local net bonded debt was \$104.81, as compared with \$98.96 in 1927 and \$66.10 in 1922.

TAX COLLECTIONS

Taxes collected in the United States continue to increase in amount. The combined total for the federal, state and local governments for the fiscal year ended in 1927 was \$9,059 millions, as compared with \$8,605 millions for the preceding year. Combined tax collections for the fiscal year ended in 1928 are estimated at \$9,289 millions, or \$77.39 per

capita. The proportion of tax collections to national income in that year was 11.9%.

Federal tax collections in recent years have been on a much lower level than during the World War and the years immediately following. Since state and local tax collections have been increasing, there has been a decline in the proportion of federal tax collections to combined tax collections. The proportion was 60.3% in 1919, 41.9% in 1923, and 34.4% in 1928. Although state tax collections are much smaller in amount than those of the local governments, state tax collections have in recent years been expanding at a more rapid rate. State tax collections constituted 15.8% of combined tax collections for the fiscal year ended in 1928, as compared with 12.7% for the fiscal year ended in 1923.

SOURCES OF TAX REVENUE

The most significant feature of the federal revenue system is the predominance of income taxes. For the fiscal year ended in 1929, collections on account of personal and corporation income taxes amounted to \$2,331 millions, or 65.7% of total federal tax collections. Customs duties rank second and sumptuary excises third in amounts of federal tax revenue produced.

Licenses and permits as a group produce a larger amount of state tax revenue than do general and special property taxes combined. For the fiscal year ended in 1927, the respective amounts were \$679 millions and \$470 millions. New gasoline tax laws and increased receipts from motor vehicle licenses have contributed materially to the increase in total receipts from licenses and permits. Special taxes, such as inheritance and income taxes, are becoming more important in the state revenue systems but they produce a relatively small proportion of total state tax revenue.

Property tax collections comprised about 93% of total local tax collections in each of the fiscal years ended in 1926, 1927 and 1928. Property tax collections by local governments amounted to \$4,298 millions for the fiscal year ended in 1928, as compared with \$332 millions from all other sources of tax revenue.

HIGHWAY FINANCE

Highway expenditures, exclusive of municipal expenditures for streets and bridges, amounted to \$1,554 millions in 1928. In recent years, expenditures by state governments for highway purposes have increased more rapidly than have local expenditures. State highway expenditures in 1928 amounted to \$792 millions, or 50.9% of the combined total. Expenditures for construction amounted to 52.7% of total highway expenditures in 1928, a larger proportion than in either of the two preceding years.

Gasoline taxes and motor vehicle license receipts allocated to highway purposes amounted to \$598 millions in 1928, an increase of 36.9% over highway income from the same sources in 1926. Taxes and appropriations¹ accounted for \$553 millions of highway income in 1928. In that year highway income from gasoline taxes and motor vehicle licenses for the first time exceeded highway income from taxes and appropriations. Federal aid funds used for highways and receipts from the sale of highway bonds remained practically constant in the years 1926, 1927 and 1928.

¹ Not including gasoline taxes and motor vehicle license receipts.

APPENDICES



APPENDIX A

SOURCES AND METHODS

In many cases the text and tabulations in this volume represent a summation of lengthy and involved computations. As a matter of record and to provide a check upon its calculations, the National Industrial Conference Board believes that the principles and methods of these computations should be fully stated. Since in most cases the method used in preparing this study was the same as that used in "Cost of Government in the United States, 1926-1927," the present discussion necessarily reproduces in large measure that of the previous volume. However, in a few cases slight changes, which will be fully explained, have been made in the method formerly used.

Sources of Data

Data on federal finances are drawn almost exclusively from the reports of the Secretary of the Treasury and from the departmental figures published in the annual treasury reports.

For figures on state finances, the Conference Board has relied upon the "Financial Statistics of States" series of the United States Bureau of the Census and upon data obtained by correspondence with that Bureau, unless otherwise indicated.

There is no centralized source for data on the finances of local governments. The United States Bureau of the Census, in connection with its decennial census reports, has given certain fiscal statistics of local governments in its "Wealth, Debt and Taxation" series. For intermediate years, however, the Bureau of the Census reports only statistics for cities with populations in excess of 30,000 in its "Financial Statistics of Cities" series. The basic data on local taxes and expenditures must be obtained from the regular or intermittent surveys of local finances published by certain states and by a sampling of published local reports or by questionnaire.

Finally, extensive use has been made of the published documents of the United States Bureau of Internal Revenue, of the United States Bureau of Public Roads, and of the United States Bureau of Education. Through the courtesy of the officials of these departments, the Conference Board has been permitted access to certain data prior to their publication.

Annual Accounting Period

In the present study, the accounting period used is that of fiscal years ending in a given calendar year. While this lacks the definiteness of the calendar year period, the Conference Board decided to use it for the following reasons:

1. In few cases do the fiscal years of governmental authorities coincide with the calendar year. The attempt to bring about an exact equivalence would involve the application of fractional calculations to the numberless accounts of the local authorities, a task the magnitude of which would be wholly incommensurate with any probable value of the results. The sampling method, used by the Board in its earlier studies, involved a possibility of error which is avoided by the use of fiscal years.

2. The United States Bureau of the Census uses fiscal years in its "Financial Statistics of States" and "Financial Statistics of Cities" series. The adoption of the same accounting period by the Conference Board permits it to make direct use of the data in those series.

It should be noted that data on state and local borrowings are drawn from the *Commercial and Financial Chronicle*, and these figures are for calendar years.

Calculation of Public Expenditures

Federal expenditures are fully reported in the annual reports of the Secretary of the Treasury. The figures presented in Table 1 are based upon the daily treasury statements, with the expenditures of the District of Columbia excluded. The net total of expenditures and the figures for interest payments in Table 4 are from the unrevised daily treasury statements. The figures for debt redemption are from the revised daily treasury statements. The revised statement takes into account transactions reported after the close of the fiscal year, but the difference between the two statements is insignificant.

For state governments the figures for the departmental expenditures and interest payments are from the "Financial Statistics of States" series. The figures for debt redemption were obtained from the "State and Local Compendium" of the *Commercial and Financial Chronicle*. The totals in Table 1 include disbursements in aid of local projects but do not include the expenditures out of funds received from the Federal Government or from local governments.

Since 1913, the United States Bureau of the Census has published no data on local expenditures, except for cities with populations in

excess of 30,000. The following data on local expenditures are available: complete reports by the authorities of several states on the finances of their local governments, the Census Bureau statistics for cities over 30,000, the calculation of local school expenditures by the United States Bureau of Education and the figures on local highway expenditures published by United States Bureau of Public Roads.

The net total of local expenditures for 1927 was obtained as follows: to the net expenditures of cities over 30,000 were added (1) local¹ road expenditures as published by the United States Bureau of Public Roads, plus an estimated amount for expenditures of cities under 30,000 for highway purposes; (2) local school expenditures² published by the United States Bureau of Education; (3) expenditures for other functions included under net expenditures (exclusive of expenditures of cities over 30,000), which were estimated on basis of sample obtained from the reports for states in which complete local tabulations are made. To obtain the gross total, payments for interest and debt redemption were added. Debt redemption figures published in the "State and Local Compendium" of the *Commercial and Financial Chronicle* were used. The interest payments of cities over 30,000 were obtained from "Financial Statistics of Cities." Interest payments of other local governments were estimated on basis of their outstanding indebtedness and the local data available on interest rates.

The following method was used as a check against the above calculation: the tax collections of cities over 30,000 were deducted from total local tax collections, and to the remainder was added the increase in local net bonded indebtedness attributable to all localities other than cities over 30,000, and an estimated amount for miscellaneous non-tax revenue. The total thus obtained was added to expenditures of cities over 30,000 as reported in "Financial Statistics of Cities" and the result was in close agreement with the figure previously obtained, excluding, of course, the figure for debt redemption. The two estimates could not be expected to yield exactly the same results, as the former represents expenditures while the latter, except for cities over 30,000, is an estimate of receipts available for expenditure.

Functional Classification of Public Expenditures

To the extent that certain governmental functions are carried on solely by the federal, state, or local governments, each category

¹ County, town and district.

² The 1927 amount was estimated from the 1926 data; the 1927 data are not yet available.

has a somewhat different content for each of the several governmental divisions. There is, however, sufficient overlapping of functions and, in general, sufficient agreement in the social effects of the different functions to make a common classification under broad categories worth while. The items included under each heading in Tables 6 and 7 are as follows:

1. General government includes all expenses of the executive, legislative and judiciary branches of government and all other overhead charges, such as the salaries and expenses of minor administrative officials and bureaus, elections expenses, government buildings and printing and stationery.

2. Protection includes all expenses of police, fire, war and navy departments and all pensions and grants to retired employees of those departments. It also covers corrective and penal institutions, and the expenses of government departments charged with the regulation of labor and industry or of any particular professional or business activity.

3. Education covers the expenses of the administrative bureaus or officials, as well as the direct expenditures for schools and libraries.

4. Highways include streets, roads, bridges, waterways and the overhead administration charges in connection with their construction and maintenance.

5. Economic development includes conservation and reclamation projects, agricultural encouragement, expenditures for the eradication of crop-destroying insects or of diseases of domesticated animals, and the expenses of administration incidental to these functions. The harbor improvements of the Federal Government are covered under this title, but the municipal harbor improvements, which have a rental value for the local government, are not included.

6. Social welfare activities of the several governmental divisions are the most diverse of all. There are the costs of charity, and relief of the poor, aged or sick usually undertaken by local governments. Of a quite distinct nature are the expenditures for economic welfare, such as workmen's compensation and the supervision of the conditions of women and children in industry. Falling between these extremes are expenditures for pensions of former civil government employees, mothers' pensions, recreation, sanitation and health. The federal expenditures by the Bureau of Indian Affairs have also been classed as social welfare.

7. Miscellaneous covers items undistributed in available reports.

8. Public utilities cover public service enterprises operated under

governmental authority for revenue. Only the expenditures not charged off against operating revenue are included.

The net total is the sum of these eight groups of departmental expenditures. The figure for interest covers the interest on public indebtedness, and debt redemption represents the net retirements, excluding refundings and conversions. It does not include additions to sinking funds. In the case of state and local expenditures, it covers the bonded debt retired by cash payments.

Determining the Amount of Expenditures for Specific Purposes

The daily treasury statements do not report federal departmental expenditures in sufficient detail for functional analysis. The percentage distribution of federal expenditures in Table 6 was therefore based on the Treasury's record of checks issued.

The percentage distribution of state expenditures, shown in Table 7, includes federal aid expenditures, as well as state aid to local governments. All disbursements by state governments were included for the purpose of comparison with local expenditures. In the figures for combined state and local expenditures given in Table 6, federal aid to the states has been eliminated, except for \$9.9 millions that can not be eliminated in the functional distribution.

Public Indebtedness

The data on the public debt of the Federal Government and on the indebtedness of foreign countries to the United States were obtained from the annual reports of the Secretary of the Treasury or through correspondence with the Treasury Department. The figures for annual state and local borrowings were taken from the "State and Local Compendium" of the *Commercial and Financial Chronicle*. The functional distributions of state and of municipal indebtedness are published annually in "Financial Statistics of States" and in "Financial Statistics of Cities," respectively. The volume of state and local net bonded indebtedness, as presented in Tables 21 and 22, is found for 1913 and 1922 in the census volumes on "Wealth, Debt and Taxation" for those years. The 1925, 1926 and 1927 figures were computed as follows:

To the net bonded state and local debt of each state in 1922 were added the bonds issued during the period from 1923 to 1927, inclusive, as reported by the *Commercial and Financial Chronicle*. From this total was subtracted the amount of bonds retired in those years, obtained from the same source. The total sinking fund assets of states and of cities over 30,000 in each state were

computed for 1922 from the census volume on "Public Debt," and for 1925, 1926 and 1927 from "Financial Statistics of States" and "Financial Statistics of Cities." The net bonded state and local debt of each state was then corrected in accordance with the changes in the sinking fund assets thus computed. Changes in the sinking fund assets of local governments exclusive of cities over 30,000 are not available.

In computing the figure for combined state and local net bonded debt in 1928, presented in Table 15, the same method was used. However, total sinking fund assets of states and of cities over 30,000 were estimated on the basis of trend over the previous years, since "Financial Statistics of States" and "Financial Statistics of Cities" for 1928 were not yet available.

The net bonded indebtedness of state governments was computed from "Financial Statistics of States," and the net bonded indebtedness of cities over 30,000 was computed from "Financial Statistics of Cities." The net bonded indebtedness of other local governments is represented by the difference between the sum of these two and the combined state and local net bonded debt.

State and Local Taxes

Data for both state and local taxes for 1890, 1903, 1913 and 1922 were obtained from the reports on "Wealth, Debt and Taxation" of the United States Bureau of the Census. For other years, data for state and for local taxes were obtained from distinct sources.

The state taxes include, in addition to all taxes collected by the state for its own use, all taxes collected locally and turned into the state treasury directly out of the tax funds. Local collections include taxes collected under the supervision of state departments or officials which are retained by or revert to the respective local governments, in addition to the taxes collected in accordance with local ordinances or levies. Funds received by one governmental unit out of the treasury of another government, in aid of an expenditure program, are not included in the taxes of the government receiving the disbursement, although the money available for such purpose be definitely limited to certain tax receipts.

The Computation of Local Tax Collections

Complete collection figures for local taxes are reported in very few states. In most states the Auditor, Comptroller or Treasurer reports the share of inheritance, income, gasoline, motor vehicle license and other taxes received by the local governments. In other cases, where the share of such taxes received by the local

governments is in direct proportion to the state's share, these local taxes can be easily computed. These special tax receipts, however, form a very small proportion of the tax revenue of the local governments.

Property taxes comprise more than ninety per cent of local tax revenues. Unfortunately, property taxes in most states are reported on the basis of levies instead of receipts. The estimate of local property tax collections from year to year must therefore be made on the basis of the levies reported. The chief problem resulting from the calculation of collections from levies is the determination of the fiscal year to which the taxes are to be ascribed.

The length of time between the levy of a property tax and its collection varies from several months to over a year, according to the laws of the several states. Though the tax usually becomes a lien and is charged as a public account on the date of the levy, it could not properly, in the study at hand, be charged as of the date of levy. In order to bring all the local data into conformity with federal and state taxes, it was necessary to determine within which fiscal year period the levies reported as of a particular date were collectible. This was accomplished through a careful examination of the tax laws bearing on this point in each state. In a majority of cases it was found that for most of the local governments in a state, the collection of the property tax was made in the fiscal year following the levy. In this study, such tax receipts have been charged to the fiscal years following the levy.

There are several states which make incomplete reports or no reports at all of local property tax levies or collections. In these cases, an attempt was made to obtain representative samples of local taxes collected, and the index of increase or decrease derived from these samples was applied to the local data reported for 1922 in the Census Bureau's "Wealth, Debt and Taxation" series. In all cases in which a sample was used to obtain an estimate, the proportions of taxes to be estimated was reduced as much as possible by using data for cities over 30,000, as given in "Financial Statistics of Cities," and such data for other local divisions as were available.

The use of levy data to estimate property tax collections does not make allowance for tax delinquency or back tax collections. Since actual property tax collections for some states are available, it is desirable to adjust the levy data for those states for which collection data are not available so that the data for all states will be on a comparable basis. In certain cases, estimates were made of the proportion of levies actually collected through the use of published data on delinquency, and for other states tax officials

supplied estimates of the ratio of collections to levies. For all states for which such an estimate could be obtained, the levies were adjusted to a collection basis. The use of unadjusted levy data for those states for which an estimate could not be obtained involves the assumption that over a period of time property tax collections are equal to the corresponding levies. Since back tax collections tend to offset taxes which become delinquent the use of levy in lieu of collections data results in only a small margin of error.

In most states, as indicated above, data on local receipts from special taxes are available, and these were added to the total of local tax collections. In the few states where there was no indication as to the trend in these special tax collections they were assumed to have increased since 1922 at the same rate as population.

It is evident that the Conference Board's estimates of local tax collections were not made by any rule-of-thumb method applied to all cases. Each state was considered as a unit and in all cases the available sources of data were carefully examined and doubtful points were referred to the tax authorities. As a result of correspondence, it was possible to use the most reliable figures available as well as to clear up doubtful points concerning tax administration and other matters pertinent to the study.

State by State Distribution of Federal Tax Collections

The state by state distribution of federal tax collections given in Table 38 was estimated by adding the customs duties, pro-rated on the basis of population at the beginning of the fiscal year, to the collections in each state reported by the Bureau of Internal Revenue. The totals in Table 38 differ from the federal tax collections in Table 28 for three reasons:

1. Some of the collections entering the Bureau of Internal Revenue reports at the close of the fiscal year are not recorded in the treasury accounts until the beginning of the succeeding fiscal year.

2. Refunds are not accounted for by states and are therefore not deducted in Table 38.

3. Federal taxes from territorial possessions are included in Table 28 but are not included in Table 38.

The totals in Tables 32, 36 and 37 differ from those in Table 38 because federal taxes from territorial possessions are included in those three tables, but are not included in Table 38.

APPENDIX B

FOOTNOTES TO TABLES 35 AND 44

Note 1. In making certain estimates, the 1922 ratio to population was used. Such an estimate involves, first, dividing the receipts for 1922 by the population in that year and, second, multiplying the population in the year for which the estimate is made by the ratio for 1922.

Note 2. In this appendix, "licenses and permits" refers to licenses and permits other than motor vehicle licenses and gasoline taxes. In Table 44, however, receipts from motor vehicle licenses and gasoline taxes are included under licenses and permits.

Maine.—Property and poll taxes from the Reports of the Board of State Assessors and letter of May 24, 1928. Licenses and permits for Portland and Lewiston from "Financial Statistics of Cities," 1926 and 1927; 1928 licenses and permits for these cities estimated on basis of average percentage change in preceding years. Other licenses and permits estimated on basis of 1922 population ratio.

New Hampshire.—All taxes from Annual Reports of the State Tax Commission. Insurance company, savings bank, and building and loan association taxes are treated as forming local shares in state corporation taxes and are classified under "Other taxes." Local automobile permits included under licenses and permits. Poll tax collections estimated as equal to 90% of the assessment.

Vermont.—Property and poll taxes from Biennial Reports of the Commissioner of Taxes. Licenses and permits estimated as constant since 1922.

Massachusetts.—Property taxes for 1926 and 1927 from Annual Reports on the Statistics of Municipal Finances, published by the Department of Corporations and Taxation. Property taxes for 1928 calculated from the levy data as published in the Report of the Commissioner of Corporations and Taxation. The average of the ratios of collections to levies for the two preceding years was applied to the total local levy figure in order to make the 1928 figure comparable to those for the preceding years. Poll taxes estimated on basis of 1922 population ratio. Income taxes from the Annual Reports of the Commissioner of Corporations and Taxation. Local shares in corporation taxes for 1926 and 1927 from Annual Reports on Statistics of Municipal Finances, and for 1928 from the Report of the Commissioner of Corporations and Taxation. Licenses and permits for cities and towns for 1926 and 1927 from Annual Reports on Statistics of Municipal Finances. County licenses and permits estimated. Licenses and permits for 1928 estimated to be the same as in 1927; the 1927 licenses and permits were less than in 1926.

Rhode Island.—Property taxes from letters of Board of Tax Commissioners dated January 17, 1927, and August 29, 1929; poll taxes estimated on basis of 1922 ratio of polls to population. Licenses and permits for cities over 30,000 from "Financial Statistics of Cities" for 1926 and 1927; 1928 licenses and permits for these cities estimated on basis of average percentage change for preceding years. Other licenses and permits estimated on basis of 1922 population ratio. Special district taxes estimated by ratio to total taxes in 1922.

Connecticut.—All taxes, except licenses and permits, from Annual Reports of the State Tax Commissioner on Information Relative to the Assessment and Collection of Taxes. Licenses and permits for 1928 from the Quadrennial Report of Indebtedness, Receipts and Expenditures of Municipalities. Licenses and permits

for 1926 and 1927 estimated on basis of 1928 population ratio. The counties' share in the unincorporated business tax included under licenses and permits.

New York.—Property and special taxes from Annual Reports of the Comptroller on Municipal Accounts. Local share in motor vehicle licenses from "Public Roads." New York City's share in motor vehicle licenses from Reports of the City Comptroller. All other licenses and permits from the State Comptroller's Special Reports on Municipal Accounts.

New Jersey.—All taxes, except licenses and permits, from Annual Reports of State Board of Taxes and Assessments. Licenses and permits for fifteen cities having a population in excess of 30,000 from "Financial Statistics of Cities," 1926 and 1927. Licenses and permits for 1928 for cities over 30,000 estimated on basis of average percentage change for preceding years. Other licenses and permits estimated on basis of 1922 population ratio.

Pennsylvania.—Property tax collections for 1927 from Bureau of Statistics, Department of Internal Affairs. Property taxes for 1926 calculated from levy data furnished by Bureau of Statistics, Department of Internal Affairs; the ratio of collections to levies in 1927 was applied to the levy data for this year. Property taxes for 1928 estimated on basis of average percentage change for preceding years. Poll taxes for 1926 and 1927 for cities over 30,000 from "Financial Statistics of Cities"; 1928 poll taxes for cities over 30,000 estimated to be the same as in the preceding year. Other poll taxes estimated on basis of ratio of poll taxes to population in 1922. Local share in the gasoline tax from "Public Roads." Licenses and permits for cities over 30,000, including county licenses and permits reported for Pittsburgh, from "Financial Statistics of Cities" for 1926 and 1927; 1928 licenses and permits for these cities estimated to be the same as in 1927. Other licenses and permits for cities less than 30,000 estimated constant since 1922. County and special district licenses and permits estimated on basis of 1922 ratio to population of state excluding Philadelphia and Pittsburgh.

Ohio.—Property taxes for 1926 and 1927 from Annual Reports of the State Auditor. Local shares in gasoline taxes and motor vehicle licenses and local share in inheritance taxes from same reports. Other licenses and permits estimated on basis of population changes since 1922.

Indiana.—All taxes from Statistical Reports compiled by the Legislative Bureau of the Indiana Library and Historical Department.

Illinois.—Property taxes from Biennial Reports of the State Auditor, "Taxes Extended," corrected by annual estimate of delinquencies. Poll taxes estimated as \$64,000, the same as in 1922. Inheritance taxes from Biennial Reports of the State Auditor. Licenses and permits for cities over 30,000 from "Financial Statistics of Cities," 1926 and 1927. Licenses and permits for 1928 for cities over 30,000, with the exception of Decatur, Quincy, and Springfield, estimated on basis of average percentage change for preceding years; 1928 licenses and permits for Decatur, Quincy, and Springfield estimated to be the same as in 1927. Other licenses and permits estimated on basis of ratio to population in 1922.

Michigan.—Property taxes from Biennial Reports of State Tax Commission. Local shares in gasoline tax and motor vehicle licenses from Annual Reports of the Auditor General. Local shares in mortgage and bond taxes estimated from Annual Reports of the Auditor General; the shares received by the localities are equal to the state share. Licenses and permits for cities over 30,000 from "Financial Statistics of Cities," 1926 and 1927. Licenses and permits for 1928 for cities over 30,000 estimated on basis of average percentage change in preceding years. Other licenses and permits estimated on basis of 1922 ratio to population.

Wisconsin.—Taxes, except income taxes and miscellaneous licenses and permits for 1928, from Biennial Report of the Wisconsin Tax Commission and letter from the Commission dated April 5, 1927. Income taxes for 1928 calculated from data contained in a letter from the Commission dated September 23, 1929. Licenses

and permits for 1928, other than the insurance, telephone and occupational taxes, estimated on basis of average percentage change in preceding years. All taxes from the Reports of the Wisconsin Tax Commission are on the basis of the state fiscal year ending June 30. The 1928 income taxes are on a calendar year basis. A change in the time of assessing income taxes makes this adjustment necessary in order that 1928 income taxes can be placed on a comparable basis to those of preceding years.

Minnesota.—Taxes, except poll taxes and licenses and permits, from the Reports of the Minnesota Tax Commission. Poll taxes estimated as \$6,000, the same as in 1922. Licenses and permits for Minneapolis, St. Paul and Duluth from "Financial Statistics of Cities," 1926 and 1927; licenses and permits for 1928 for these cities estimated on basis of average percentage change in preceding years. Other licenses and permits estimated on basis of 1922 ratio to population.

Iowa.—Property and poll taxes from Annual Reports of the State Auditor. Levy figures for property taxes adjusted to collection basis by means of data contained in County Auditing Section of the Auditor's Reports. Local share in motor vehicle licenses and gasoline taxes from "Public Roads." Motor mileage tax from the Auditor's Report; licenses and permits from the Annual Reports on Municipal Accounts. Licenses and permits for towns partly estimated.

Missouri.—Property taxes from Annual Reports of the State Auditor. Poll taxes for cities over 30,000 from "Financial Statistics of Cities." Other poll taxes estimated from sample obtained by questionnaire. Licenses and permits for cities over 30,000 from "Financial Statistics of Cities," 1926 and 1927; 1928 licenses and permits for these cities estimated on basis of average percentage change in preceding years. Other licenses and permits estimated on basis of 1922 ratio to population.

North Dakota.—Property, poll and inheritance taxes from the Reports of the State Tax Commission. Motor vehicle licenses from "Public Roads." Other licenses and permits estimated as constant since 1922; the population has not increased. Separate data are not published for the road poll tax. The rate for this tax is two-thirds of the school poll rate, and road polls were taken to be two-thirds of the school poll taxes.

South Dakota.—Property and poll taxes from the Reports of the Department of Finance, Division of Taxation. Property tax collections estimated by Department of Finance as equivalent to 97% of levies. Inheritance taxes from letter of September 17, 1929. Local share in motor vehicle licenses from "Public Roads." Other licenses and permits estimated on basis of 1922 ratio to population.

Nebraska.—Property and poll taxes from Reports of the State Tax Commissioner, 97% of levies being estimated as collected in accordance with estimate furnished by State Tax Commissioner. Inheritance taxes estimated. Motor vehicle licenses from "Public Roads." Licenses and permits for Omaha and Lincoln from "Financial Statistics of Cities," 1926 and 1927; 1928 licenses and permits for these cities estimated on basis of data for preceding years. Other licenses and permits estimated on basis of 1922 ratio to population.

Kansas.—Property and inheritance taxes from Tenth Biennial Report of the Tax Commission and Eleventh Biennial Report of the Tax Department of the Public Service Commission. Poll taxes estimated on basis of 1922 ratio to population. Motor vehicle licenses from "Public Roads." Licenses and permits for cities over 30,000 from "Financial Statistics of Cities," 1926 and 1927; 1928 licenses and permits for cities over 30,000 estimated on basis of average percentage change in preceding years. Other licenses and permits estimated on basis of 1922 ratio to population.

Delaware.—Property, poll taxes and licenses and permits for Sussex County from letter dated August 14, 1929. New Castle County taxes from Auditor's Reports. Kent County taxes estimated on basis of trend over a period of years. Wilmington taxes from "Financial Statistics of Cities." Property taxes of other incorporated

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places estimated on basis of 1922 ratio to population. Poll taxes and licenses and permits of other incorporated places estimated to be same as in 1922.

Maryland.—Property taxes, except for incorporated places, from Reports of the State Tax Commission. Baltimore taxes included in these reports. Property taxes of other incorporated places estimated on basis of questionnaire returns. Baltimore licenses and permits from "Financial Statistics of Cities," 1926 and 1927; 1928 Baltimore licenses and permits estimated on basis of average percentage change in preceding years. Other licenses and permits estimated.

District of Columbia.—All taxes for 1926 and 1927 from "Financial Statistics of Cities"; 1928 taxes from letter from the Bureau of the Census dated November 7, 1929.

Virginia.—County property taxes for 1926 and 1927 from "Comparative Cost of Local Government." County property taxes for 1928 estimated on basis of trend over a period of years. City and town taxes for 1927 and 1928 from letter from Dr. W. H. Stauffer, of the Virginia Tax Commission, dated October 31, 1929. City and town property taxes for 1926 estimated on basis of 1927 and 1928 ratios of city and town taxes to city levies. Poll taxes from Reports of the State Auditor and "Comparative Cost of Local Government" series. County poll taxes for 1928 from letter from the State Comptroller, dated October 29, 1929. Gasoline tax and motor vehicle carriers tax for 1926 and 1927 from Reports of the State Auditor; 1928 figures for these taxes from letter from the State Comptroller, dated October 29, 1929. Licenses and permits for cities over 30,000 from "Financial Statistics of Cities," 1926 and 1927; 1928 licenses and permits for cities over 30,000 estimated to be same as 1927. Other licenses and permits estimated on basis of 1922 ratio to population.

West Virginia.—Property taxes from Reports of State Tax Commission. Poll taxes for cities over 30,000 from "Financial Statistics of Cities." Poll taxes of other civil divisions estimated on basis of 1922 ratio to population. Licenses and permits for cities over 30,000 from "Financial Statistics of Cities," 1926 and 1927; 1928 licenses and permits for these cities estimated on basis of average percentage change in preceding years. Licenses and permits of other civil divisions estimated on basis of 1922 ratio to population.

North Carolina.—Property taxes for 1926 and 1927 from Reports of the State Education Commission and the State Tax Commission; levies for prior year are used. Property taxes for 1928 estimated on basis of 1926 and 1928 levy data. Poll taxes for 1926 and 1927 from Reports of the State Department of Revenue. Poll taxes for 1928 estimated to be same as 1927. Licenses and permits for cities over 30,000 from "Financial Statistics of Cities" for 1926 and 1927; 1928 licenses and permits for cities over 30,000 estimated on basis of average percentage change in preceding years. Licenses and permits of other civil divisions estimated on basis of 1922 ratio to population.

South Carolina.—County and school district property and poll taxes from Reports of the Comptroller-General. Charleston and Columbia property and poll taxes, and licenses and permits for 1926 and 1927 from "Financial Statistics of Cities"; 1928 property and poll taxes for these cities estimated. Property taxes, poll taxes, and licenses and permits of other civil divisions estimated on basis of 1922 ratio to population. Gasoline tax from "Public Roads."

Georgia.—Property taxes from Annual Reports of Comptroller-General, computed on basis of average rates on railroad and other public utility property. Poll taxes estimated on basis of 1922 ratio to population. Gasoline tax from "Public Roads." Licenses and permits for cities over 30,000 from "Financial Statistics of Cities" for 1926 and 1927; 1928 licenses and permits for cities over 30,000 estimated on basis of average percentage change in preceding years. Licenses and permits of other civil divisions estimated from sample obtained by questionnaires.

Florida.—County, school, road, drainage, and special property taxes from Annual

Reports of the Comptroller. Jacksonville and Tampa property taxes for 1926 and 1927 from "Financial Statistics of Cities." Jacksonville and Tampa property taxes for 1928 estimated from levy data. Miami and St. Petersburg property taxes from questionnaire returns. Property taxes of other cities estimated from sample obtained by questionnaires. Poll taxes estimated on basis of 1922 ratio to population. Gasoline tax and motor vehicle licenses from "Public Roads." Licenses and permits for Jacksonville, Miami, and Tampa for 1926 and 1927 from "Financial Statistics of Cities"; 1928 licenses and permits for Jacksonville and Tampa estimated on basis of average percentage change in preceding years. Miami licenses and permits for 1928 estimated to be same as 1927. St. Petersburg licenses and permits from questionnaire returns. County and smaller city licenses and permits estimated from sample obtained by questionnaire.

Kentucky.—Property taxes for counties and civil divisions other than cities over 30,000 estimated from sample obtained by questionnaire. Louisville property taxes from the Reports of the City Comptroller. Lexington and Covington property taxes for 1926 and 1927 from "Financial Statistics of Cities." Lexington property taxes for 1928 estimated on basis of average percentage change in preceding years. Covington property taxes for 1928 estimated by ratio of collections to levy in preceding year, using the levy figure on account of which collections were made in 1928. Poll taxes estimated from sample obtained by questionnaire. Licenses and permits for civil divisions other than cities over 30,000 estimated from sample obtained by questionnaire. Licenses and permits for Louisville, Lexington and Covington for 1926 and 1927 from "Financial Statistics of Cities"; 1928 licenses and permits for these cities estimated on basis of average percentage change in preceding years.

Tennessee.—County property taxes from Reports of the Commissioner of Finance and Taxation. Property taxes for 1926 and 1927 for cities over 30,000 from "Financial Statistics of Cities"; 1928 property taxes for these cities estimated on basis of levy data. Property taxes for smaller cities estimated from sample obtained by questionnaire. Special district property taxes estimated on basis of trend of county property taxes. Poll taxes estimated on basis of 1922 ratio to population. Licenses and permits for 1926 and 1927 for cities over 30,000 from "Financial Statistics of Cities"; 1928 licenses and permits for these cities estimated on basis of average percentage change in preceding years. Licenses and permits for other cities estimated from sample obtained by questionnaire. County licenses and permits estimated on basis of 1922 ratio to population.

Alabama.—Property taxes for all civil divisions except cities over 30,000 estimated from sample obtained by questionnaire. Property taxes for 1926 and 1927 for cities over 30,000 from "Financial Statistics of Cities." Birmingham property taxes for 1928 calculated from release of the United States Bureau of the Census on "Financial Statistics of Birmingham for 1928." Property taxes for Mobile and Montgomery for 1928 estimated on basis of average percentage change in preceding years. Poll taxes from Annual Report of the State Auditor. Gasoline tax and motor vehicle licenses from "Public Roads." Licenses and permits for 1926 and 1927 for cities over 30,000 from "Financial Statistics of Cities"; 1928 licenses and permits for these cities estimated on basis of average percentage change in preceding years. Licenses and permits for counties and cities under 30,000 estimated from sample obtained by questionnaire.

Mississippi.—General property taxes estimated from sample obtained by questionnaire. Local share in state special property taxes calculated from state data published in "Financial Statistics of States." Poll taxes estimated to be same as in 1922. Local share in other special state taxes estimated from state data published in "Financial Statistics of States." Gasoline tax from the Reports of the State Auditor. Motor vehicle licenses from "Public Roads." Licenses and permits for cities estimated from sample obtained by questionnaire. Licenses and permits for other civil divisions estimated constant since 1922; the United States Bureau of the

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Census estimates the population of Mississippi as not having increased since that date.

Arkansas.—Property taxes for 1926 from "The Farm Problem in Arkansas," by C. O. Brannen. Property taxes for 1927 and 1928 estimated from sample obtained by questionnaire. County poll taxes for 1926 from "The Farm Problem in Arkansas." County poll taxes for 1927 and 1928 estimated to be same as in 1926. City poll taxes estimated on basis of 1922 ratio to population. Local share in severance tax from letter from the State Treasurer, dated November 7, 1929. Licenses and permits for Little Rock for 1926 and 1927 from "Financial Statistics of Cities." Licenses and permits for 1928 for Little Rock estimated on basis of average percentage change in preceding years. Licenses and permits for other civil divisions estimated on basis of 1922 ratio to population.

Louisiana.—Property taxes for parishes, including City of New Orleans, from Annual Report of the State Tax Commission. Shreveport property taxes for 1926 and 1927 from "Financial Statistics of Cities." Shreveport property taxes for 1928 estimated on basis of average percentage change in preceding years. Property taxes for smaller cities estimated on basis of sample obtained by questionnaire. Poll taxes for parishes from Annual Reports of the State Tax Commission. New Orleans poll taxes for 1926 and 1927 from "Financial Statistics of Cities." New Orleans poll taxes for 1928 estimated on basis of average percentage change in preceding years. Local share in severance tax for 1928 from letter of the State Tax Commission, dated October 21, 1929. Licenses and permits for New Orleans and Shreveport for 1926 and 1927 from "Financial Statistics of Cities"; 1928 licenses and permits for these cities estimated on basis of average percentage change in preceding years. Licenses and permits for other civil divisions estimated on basis of 1922 ratio to population.

Oklahoma.—Property taxes, except for cities over 30,000, estimated from sample obtained by questionnaire. Property taxes for 1926 and 1927 for cities over 30,000 from "Financial Statistics of Cities." Property taxes for 1928 for cities over 30,000 calculated from releases of the United States Bureau of the Census. Gasoline tax and motor vehicle licenses from "Public Roads." Licenses and permits for 1926 and 1927 for cities over 30,000 from "Financial Statistics of Cities"; 1928 licenses and permits for these cities estimated on basis of average percentage change in preceding years. Licenses and permits for other civil divisions estimated on basis of 1922 ratio to population.

Texas.—County property taxes calculated from valuation and rate data in Annual Reports of the Comptroller of Public Accounts. Property taxes for cities over 30,000 from "Financial Statistics of Cities" and questionnaire returns. Property taxes for other civil divisions estimated from sample obtained by questionnaire. Poll taxes estimated from sample obtained by questionnaire. Motor vehicle licenses from "Public Roads." Licenses and permits for 1926 and 1927 for cities over 30,000 from "Financial Statistics of Cities." Licenses and permits for 1928 for cities over 30,000 estimated on basis of average percentage change in preceding years. Licenses and permits for other civil divisions estimated on basis of 1922 ratio to population.

Montana.—Property taxes from Reports of the State Board of Equalization. Collections of property taxes estimated as 95% of levies, in accordance with estimate furnished by State Board of Equalization in letter dated October 4, 1929. Poll taxes from Reports of the State Board of Equalization. Gasoline tax for 1926 and 1927 from Reports of the State Board of Equalization. Motor vehicle licenses from "Public Roads." Local share in inheritance taxes from Reports of the State Board of Equalization. Licenses and permits for Butte for 1926 and 1927 from "Financial Statistics of Cities." Licenses and permits for Butte for 1928 estimated on basis of average percentage change in preceding years. County licenses and permits from estimate by the State Board of Equalization in letter of October 4, 1929. Licenses and permits for other civil divisions estimated to be same as in 1922.

Idaho.—Property taxes for 1926 and 1927 from letters from Bureau of Public

Accounts, dated April 13, 1927 and June 26, 1928. Property taxes for 1928 estimated on basis of percentage increase in previous years. Poll taxes from estimate by B. E. Hyatt, Director, Bureau of Public Accounts, in letter of September 25, 1929. Motor vehicle licenses from "Public Roads." Local share in inheritance tax for 1926 calculated from the state's share given in "Financial Statistics of States." Local share in inheritance tax for 1927 and 1928 from letter from Bureau of Public Accounts, dated September 25, 1929. Licenses and permits estimated on basis of 1922 ratio to population.

Wyoming.—Property taxes from Reports of State Board of Equalization. Poll taxes estimated on basis of 1922 ratio to population. Licenses and permits estimated on basis of 1922 ratio to population.

Colorado.—Property taxes for 1926 and 1927 from Reports of the State Tax Commission. Property taxes for 1928 from letter from State Tax Commission, dated November 1, 1929. Motor vehicle licenses from Reports of the State Auditor. Licenses and permits for 1926 and 1927 for cities over 30,000 from "Financial Statistics of Cities"; 1928 licenses and permits for these cities estimated on basis of average percentage change in preceding years. Licenses and permits for other civil divisions estimated on basis of 1922 ratio to population.

New Mexico.—Property taxes from Reports of State Tax Commission; reduced to collection basis by means of estimate furnished by the Tax Commission. Motor vehicle licenses from "Public Roads." Licenses and permits estimated on basis of 1922 ratio to population.

Arizona.—Property taxes from Reports of the State Tax Commission. Poll taxes estimated on basis of 1922 ratio to population. Gasoline tax from "Public Roads." Licenses and permits estimated on basis of 1922 ratio to population.

Utah.—Property taxes from Reports of the State Auditor; collections estimated as 97% of levies, in accordance with estimate furnished by State Auditor in letter of August 29, 1929. Licenses and permits for Salt Lake City and Ogden for 1926 and 1927 from "Financial Statistics of Cities." Licenses and permits for 1928 for these cities estimated on basis of average percentage change in preceding years. Other licenses and permits estimated on basis of 1922 ratio to population.

Nevada.—Property taxes from "County and City Budgets," published by State Tax Commission. Poll taxes treated as a constant since 1922. Gasoline tax and motor truck licenses from Annual Reports of the Comptroller. Other licenses and permits estimated constant since 1922.

Washington.—County and special district property taxes and licenses and permits for 1927 from United States Forest Taxation Inquiry, New Haven, Connecticut. Property taxes for 1927 for cities and towns from agency transactions of counties as reported by United States Forest Taxation Inquiry. Property taxes for 1926 and 1928 from Reports of the Division of Municipal Corporations, State Auditor's Department, on "Taxes Due"; adjusted by applying ratio obtained from 1927 data reported by United States Forest Taxation Inquiry and the 1927 data as published in "Taxes Due." County and special district licenses and permits for 1926 and 1928 estimated on basis of 1927 ratio to population. Licenses and permits for Seattle, Spokane and Tacoma for 1926 and 1927 from "Financial Statistics of Cities"; 1928 licenses and permits for these cities estimated on basis of average percentage change in preceding years. Licenses and permits of other civil divisions estimated on basis of 1922 ratio to population.

Oregon.—Property taxes from Reports of the State Tax Commission. Licenses and permits for Portland for 1926 and 1927 from "Financial Statistics of Cities"; Portland's licenses and permits for 1928 estimated on basis of average percentage change in preceding years. Licenses and permits for other civil divisions estimated on basis of 1922 ratio to population.

California.—All taxes from the Annual Reports of the State Comptroller on "Financial Transactions of Municipalities and Counties."

